

# The Mining Journal,

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

No. 2527.—Vol. LIV.

LONDON, SATURDAY, JANUARY 26, 1884.

WITH SUPPLEMENT. [PRICE BY POST, £1 4s. PER ANNUM]

**MR. JAMES H. CROFTS, STOCK AND SHARE DEALER,**  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds, (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

Business negotiated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.

MINES INSPECTED.  
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.  
TELEPHONE NUMBER 1083.

SPECIAL DEALINGS in the following, or part:—

50 Asia Minor, 3s. 6d.	100 Gold Coast, 7s. 6d.	100 Parys Copper, 2s. 6d.
100 Akankoo, fully paid, 6s. 6d.	50 Grogwin, 5s.	25 Phoenix Uni., £1 2s. 6d.
30 ditto, 17s. 6d. paid, 7s. 6d.	50 Guinea Est. Gold, 5s.	50 Panucllo, £5 15s.
25 Almaden, 8s.	10 Great Laxey, £10 10s.	100 Prince of Wales, 9s.
50 Bedford Uni., 33s. 9d.	20 Gunnis (Oilt), 28s.	50 Pastorena, 1s. 9d.
50 Bratsberg, £1 17s. 6d.	500 Hawkins Hill, 15s.	20 Rio Tinto, £19 15s.
25 Bwch United, 2s. 9d.	paid, 1s.	30 Ruby, 16s.
40 Cankin Hamoo, 10s.	50 Hington Down, 3s.	25 Richmond, £4 5s. 3d.
50 Carn Camborne, 10s.	200 Hoover Hill, 2s. 9d.	20 Roman Grav., £5 13s. 9d.
50 Callao Bis, 13s. 6d.	100 Home Mines Est., 11s.	20 South Caradon, 14s.
100 Chile Gold, 11s.	50 Hony & Trevelyan, 7s. 6d.	10 Condurrow, £9 14s.
100 Colombian Hyd., 5s. 6d.	25 Indian Consol., 2s. 6d.	50 South Darren, 9s.
100 Consolidated, 2s. 3d.	100 Indian Glenrock, 2s.	100 S. E. Wynad, 1s.
50 California, 12s.	50 Javali, 3s. 9d.	50 So. Devon Uni., 7s. 6d.
50 Colorado, £2 6s. 3d.	100 Kapanga, 2s. 3d.	100 Sortridge, 2s.
30 Canada Copper, 10s.	50 Killifreth, £1 3s.	30 South Penstruth, 1s. 9d.
50 Chontales, 4s.	50 La Plata (New), 6s. 6d.	50 Tambacherry, 5s. 6d.
25 Cor. So. Austr. Cop., 12s.	50 Last Chance, 2s.	100 Tanker, Gt. Con., 1s. 9d.
200 Denver, 3s. 3d.	20 Leadhills, £2 15s.	20 Tollima A., £2 13s. 6d.
50 Devala Moya, 3s. 6d.	100 Lisbon-Berlyn, 1s. 9d.	100 ditto B., £2 13s. 6d.
20 Devon Consols, 10s.	80 Marke Valley, 2s.	100 Treavean, 4s. 9d.
150 Devon Friend., 2s. 3d.	50 Michipicoten, 3s. 9d.	25 Trevanance, £2 7s. 6d.
50 Devon United, 7s. 6d.	100 Mounts Bay, 2s. 3d.	20 Uni. Mexican, £10 10s.
50 Dolcoath, £6 17s. 6d.	100 Mysore Gold, 2s. 3d.	20 Victoria Gold, 16s.
50 Don Pedro, 2s. 6d.	50 New Caradon, 3s.	15 Van.
50 Drakewalls, 6s.	50 New Callao, 6s. 3d.	100 Nouveau Monde Gold, 4s.
50 Duchy Peru, 10s.	50 New Emma, 13s.	100 North Blue Hills, 1s. 3d.
50 East Blue Hills, 3s. 6d.	25 New Quebrada, £5 18s. 9d.	40 New Callao Gold, 7s. 6d.
50 Eberhardt, 1s. 9d.	50 No. Blue Hills, 1s.	70 Old Shepherds, 5s. 6d.
50 East Caradon, 1s.	250 New Kitty, 37s. 6d.	50 Organos, 10s.
50 E. Craven Moor, 2s. 6d.	250 Nouv. Monde, 3s. 9d.	25 Orita Gold, 10s.
50 East Lovell, 1s. 9d.	20 No Penstruth, 2s. 6d.	25 Prince of Wales, 9s. 3d.
50 East Wh. Rose, 4s. 6d.	20 No West Caradon, 3s.	30 West Callao Gold, 11s. 6d.
50 Ecton, 3s.	100 Old Shepherds, 5s. 3d.	50 W. Caradon Cop., 2s. 9d.
50 Flagstaff, 3s.	50 Organos, 10s.	20 West Polbrean Tin, 1s. 3d.
50 Frongoch, 11s.	50 Orita, 14s.	50 West Gonamena Cop., 1s. 3d.
50 Frontino, £1 4s. 6d.	25 Polbrean, 10s.	5 W. Kitty Tin, £12 13s. 9d.
50 Goginan, 3s. 6d.	50 Penhalls, 4s. 6d.	20 Wheel Jane Tin, 2s. 6d.
	100 Potosi, 3s. 6d.	20 Wheel Orebor Copper, £1 16s. 3d.
	100 Port Phillip, 2s. 6d.	50 West Orebor Copper, 3s. 3d.
	50 Wynaad Perseu, 2s. 6d.	

SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

SPECIAL BUSINESS at CLOSE PRICES in all Market TIN, COPPER and LEAD SHARES.

**RAILWAYS—SPECIAL BUSINESS.**—Fortnightly Accounts opened on receipt of the usual cover.

**FOREIGN BONDS—SPECIAL BUSINESS.**—Fortnightly Accounts opened on receipt of the usual cover.

**AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.**—Fortnightly Accounts opened on receipt of the usual cover.

**GOLD AND SILVER MINES—SPECIAL BUSINESS in ALL** marketable INDIAN GOLD SHARES, and in California, Callao "Bis," Gold Coast, Guinea Gold Coast, Lisbon-Berlyn, New Callao, West Callao, Tollima A., Tollima B., La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Chile, Nouveau Monde, Ruby, Richmond, Victoria.

SHARES IN THE ABOVE SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.

**MISCELLANEOUS SHARES of ALL DESCRIPTIONS BOUGHT or SOLD.**—SPECIAL BUSINESS: Brighton Aquarium, General Credit, Hudson's Bay, Native Guano, Suez Canal, Westminster Aquarium, and Hotel Shares.

SHARES SOLD FOR FORWARD DELIVERY, ONE, TWO, OR THREE MONTHS, ON DEPOSIT OF TWENTY PER CENT.

**ELECTRIC LIGHT SHARES—SPECIAL BUSINESS.**—Anglo-American, Hammond, Swan, Brush, Maxim-Weston.

Shares sold for cash, account, or for forward delivery (one, two, or three months) on deposit of 20 per cent.

**EAST WHEEL ROSE, OLD SHEPHERDS, MOUNTS BAY, TREVAAN, HOME MINES TRUST, DUCHY PERU.**

SPECIAL BUSINESS in the above for cash or account.

FOR SPECIAL SALE, FOR FORWARD DELIVERY, ONE, TWO, OR THREE MONTHS, subject to deposit of TWENTY PER CENT.—200 East Wheel Rose, 4s. 6d.; 300 Mounts Bay, 2s.; 200 Old Shepherds, 5s.; 200 Treavean, 4s. 9d.; 100 Home Mines Trust, 11s. 6d.; 50 Duchy Peru (three months' forward delivery), 25s.; 100 Wheel Silver and Lanteglos, 7s.

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER.**

44, THREADENEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.

RAILWAYS, BANKS, FOREIGN AND COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.

Accounts opened for the Fortnightly Settlement.

A List of Investments free on application.

MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

50 Almaden, 8s. 3d.	50 Frontino, £1 7s. 6d.	20 Richmond, £4 5s.
30 Bratsberg, £2.	20 Great Holway, 10s.	10 Roman Gravel, £5 13s. 9d.
200 Chontales, 4s.	100 Gold Coast, 7s. 6d.	10 Ruby, 16s. 3d.
150 Colombian, 6s. 6d.	20 Killifreth, 10s.	150 Sortridge, 2s.
50 Colorado, £2 6s. 3d.	25 Leadhills, 12s. 6d.	50 South Devon, 8s.
100 California Gold, 12s.	100 La Plata, 12s. 6d.	75 South Kitty, 10s. 6d.
70 Callao Bis, 13s. 6d.	50 Montana, £5 10s.	100 Trevean, 4s. 9d.
150 Chile Gold, 11s.	25 Marke Valley, 2s. 6d.	50 Trevanance, £2 7s. 6d.
50 Copiapo, £3 10s.	100 Nouveau Monde, 3s. 9d.	20 Tollima B., £2 13s. 6d.
50 Carn Camborne, 14s.	25 N. Trumpet Con., 21s.	50 West Godolphin, 21s.
20 Devon Consols, £3 10s.	75 Organos, 17s. 6d.	15 Wheel Grenville, £5 13s. 9d.
100 Dev. Friendship, 2s. 9d.	50 Orita, 14s. 9d.	10 West Kitty, £13.
50 Drakewalls, 6s.	25 Panucllo, £5 17s. 6d.	25 Wheel Nasset, £2 13s. 6d.
40 East Caradon, 5s. 6d.	100 Pen-yr-Orsedd, 11s. 6d.	50 Wheel Pevor, 3s. 3d.
6 East Pool, 10s.	200 Potosi, 3s. 6d.	
	100 Port Phillip, 2s. 6d.	

Where prices are not inserted offers may be made.

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

Mr. Bumpus devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

**BRITISH AND FOREIGN MINING OFFICES.**

Messrs. PETER WATSON AND CO.,  
18, AUSTIN FRIARS,  
OLD BROAD STREET, LONDON, E.C.  
BANKERS: THE ALLIANCE BANK (Limited).

**MESSRS. PETER WATSON AND CO.'S**  
BRITISH AND FOREIGN MONTHLY MINING NEWS  
—STOCK AND SHARE INVESTMENT NOTES—MINES,  
MINERALS, AND METAL MARKETS—SHARE LIST,  
No. 861, VOL. XIX., for JANUARY month, is ready, and  
will be sent to customers on application.

Annual Subscription..... 5s. | Single Copy..... 6d.

The Title Page and Index to our Eighteenth Volume are now ready, and can be obtained on application.

**MR. ALFRED E. COOKE,**  
DEALER IN BRITISH AND FOREIGN STOCKS AND SHARES  
OF EVERY DESCRIPTION.  
(FROM 76, OLD BROAD STREET)  
ESTABLISHED 1853.

9, OLD BROAD STREET, LONDON.

**MINE SHARES FOR SALE.**

Mr. ALFRED E. COOKE can SELL the following lots (or any smaller number of shares) to immediate applicants at prices annexed, free of commission:—

Where prices are not inserted, the market price of the day will be taken, or offers may be made.

20 Bratsberg Cop., £1 10s.	20 New Kitty Tin, £2.	50 So. Kitty Tin, 11s.
40 Callao Bis Gold, 13s.	50 New Caradon Copper, 3s. 3d.	20 South Caradon Copper, 12s. 9d.
40 Colombian Hydraulic Gold, 6s.	100 Nouveau Monde Gold, 4s.	10 Trevanance, £2 10s.
30 Carn Camborne Tin & Copper, 10s.	100 North Blue Hills, 1s. 3d.	250 Tanker, Gt. Con., 1s. 9d.
50 Chontales Gold, 3s. 3d.	40 New Callao Gold, 7s. 6d.	50 Trevanance Copper & Tin, 4s. 3d.
50 Corp. of So. Australia, 10s.	70 Old Shepherds, 5s. 6d.	10 Tollima A., £2 13s. 6d.
30 Devon Friend., 2s. 3d.	50 Organos, 10s.	10 Untd. Mexican Silver, 4s.
20 Dolcoath Tin, £2.	25 Orita Gold, 10s.	40 Victoria Gold, 16s.
80 Duchy Peru Silver-lead, 2s. 6d.	50 Prince of Wales, 9s. 3d.	20 Western Andes, 10s.
60 East Rose Lead, 4s. 6d.	30 West Callao Gold, 11s. 6d.	50 W. Caradon Cop., 2s. 9d.
50 E. Blue Hills Tin, 3s.	50 Port Phillip Gold, 2s. 6d.	20 West Polbrean Tin, 1s. 3d.
50 Gold Coast, 7s. 6d.	50 Parys Copper, 2s.	50 West Gonamena Cop., 1s. 3d.
50 Home Mines Trust, 10s. 9d.	20 Richmond Sil., £4 10s.	5 W. Kitty Tin, £12 13s. 9d.
50 La Plata Lead, 15s. 6d.	5 Roman Gravel Lead, 10s. 9d.	20 Wheel Jane Tin, 2s. 6d.
50 Leadhills, £2 15s. 6d.	50 Ruby, 17s.	20 Wheel Orebor Copper, £1 16s. 3d.
200 Leadhills, £2 15s. 6d.	150 Sortridge Copper and Tin, 1s. 9d.	50 West Orebor Copper, 3s. 3d.
200 Mounts Bay, 2s. 9d.	20 South Darren Silver-lead, 11s. 3d.	
50 New West Caradon Copper, 3s.		

TEN PER CENT. DEPOSIT.—Many of the above shares can be sold for settlement by arrangement at the middle or end of March on payment of 10 per cent. deposit. Shares not found in the above list may be purchased on application.

MR. ALFRED E. COOKE is a BUYER and SELLER of all Shares currently dealt in at CLOSEST MARKET PRICE FREE OF COMMISSION.

TELEPHONE NUMBER, 1288.

ALFRED E. COOKE, 9, OLD BROAD STREET, LONDON.  
(Opposite the Stock Exchange, with which the office is in DIRECT TELEGRAPHIC COMMUNICATION.)

**MR. JAMES STOCKER, STOCKBROKER,**  
2, CROWN COURT, THREADENEEDLE STREET, LONDON, E.C.

Has special business in the following for cash or settlement by arrangement:—

Akankoo, 8s.	Eberhardt, 1s. 9d.	Prince of Wales, 9s. 3d.
Asia Minor, 3s. 9d.	East Blue Hills, 3s. 3d.	Parys Copper, 2s. 6d.
Bedford United, 33s. 9d.	East Rose, 3s. 9d.	Potosi, 3s. 6d.
Birdseye, 21s. 6d.	Great Laxey, £10 10s.	Richmond, £4 10s.
Bratsberg, £1 17s. 6d.	Home Mines, 11s.	Sortridge, 1s. 9d.
Callao Bis, 13s. 6d.	Isabelle, 5s. 6d.	South Caradon, 14s.
Callao Bis, 13s. 6d.	Kapanga, 2s.	Treavean, 4s. 9d.
Carn Camborne, 13s. 6d.	Killifreth, 22s.	Trevaun Gold, 10s. 9d.
Chile Gold, 11s. 3d.	Kohinoor B. 9s. 3d.	Tollima A., £2 13s. 6d.
Chontales, 3s. 3d.	La Plata, 12s. 6d.	Tollima B., £2 13s. 6d.
Copliapo, 23s. 6d.	Leadhills, £2 15s. 6d.	Victoria Gold, 16s.
Cor. South Australian, 10s.	Leadhills, £2 15s. 6d.	West Callao, 11s.
Devon Consols, £3 10s.	Montana, 3s.	West Caradon, 2s. 9d.
Devon Friend., 2s. 9d.	New Emma, 13s. 9d.	West Orebor, 2s. 9d.
Devon United, £3 10s.	New Kitty, 33s. 9d.	West Kitty, £12 13s. 9d.
Denver, 3s. 3d.	Nouveau Monde, 3s. 9d.	Wheel Jane, 2s. 6d.
Ecton, 3s.	Old Shepherds, 5s. 6d.	Yorke Pref., 5s. 9d.
	Orita, 15s. 9d.	
	Organos, 15s. 9d.	

BANKERS: LONDON AND WESTMINSTER.

**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,**  
37, WALBROOK, LONDON, E.C.

Established Twenty-five Years.

BANKERS: LONDON JOINT-STOCK.

Mr. REYNOLDS refers to his remarks on page 100.

**DESIRABLE INVESTMENTS FOR 1884.**

**THE MOST COMPLETE AND RELIABLE ADVICE TO** INVESTORS is contained in our CIRCULAR, now ready (post free).

JOHN LENN AND CO. (LIMITED),  
4 AND 5, GROCERS' HALL COURT,  
LONDON, E.C.

NOTE.—Highest, Lowest, and Latest Prices enclosed with the rate per cent. paid by each security.

**MESSRS. H. HALFORD AND CO.,**  
STOCK AND SHARE BROKERS,  
2, ROYAL EXCHANGE AVENUE, E.C.,  
Have BUSINESS in ECTON COMPANY SHARES.  
SELLERS are requested to communicate with the above.

**W. WISDOM AND CO., STOCK AND SHARE DEALERS,**  
SHARE EXCHANGE OFFICES,  
110, CANNON STREET, LONDON, E.C.

Business transacted in all classes of Securities. Selected List of Shares for immediate investment on application.

**WEARDALE LEAD MINE.—WANTED, OFFERS OF** SHARES.

Address, "Civis," MINING JOURNAL Office, 26, Fleet-street, E.C.

**JOHN RISLEY, STOCK AND SHARE BROKER,**  
AND MINING SHARE DEALER,  
38, CORNHILL, LONDON, E.C.  
ESTABLISHED 1850.

BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

**MESSRS. J. TAYLOR AND CO.,**  
MINING ENGINEERS AND INSPECTORS,  
86, LONDON WALL, LONDON, E.C.

Have Agents in the various Mining Districts of Great Britain, the Continent, Australia, and the United States of America.

Inspections undertaken, either personally or by our Agents, and Reports of Advice as to Working given.

**FERDINAND R. KIRK, STOCKBROKER,**  
5, BISHOP LANE, LONDON, E.C.

Fortnightly Accounts opened in all Stock Exchange Securities on receipt of the usual cover.

SPECIAL BUSINESS in the following or any part:—110 Nouveau Monde, 3s. 9d.

60 Akankoo, 8s.	40 Frongoch, 12s.	80 Organos.
70 Bratsberg, £1 17s. 6d.	60 Goginan, 4s.	50 Orita, 15s.
40 California Gold, 11s. 6d.	80 Gold Coast, 7s.	90 Old Shepherds, 5s. 6d.
50 Chile Gold, 11s.	30 Grogwin, 5s.	80 Parys Copper, 2s.
120 Chontales, 4s.	50 Guinea Gold, 5s.	80 Prince of Wales, 10s. 6d.
140 Colombian Hyd., 5s. 6d.	70 Home Mines Trust, 11s. 3d.	50 South Caradon, 13s.
50 Drakewalls, 6s.	11s. 3d.	40 Tollima, £2 13s. 6d.
90 East Wheel Rose, 5s.	20 Linares, £2 10s.	80 Victoria Gold, 16s.
60 Eberhardt, 1s. 9d.	40 Montana, £2.	40 Wheel Orebor, £1 16s. 3d.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

**"DIFFERENTIAL"**  
PUMPING ENGINE  
(DAVEY'S PATENT).

FOR  
DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION,  
SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL  
PUMPING PURPOSES.

**HATHORN, DAVEY, AND CO.,**  
LEADS.

HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very powerful Engines and Pumps at a short notice.

**MR. CHARLES THOMAS,**  
MINING AGENT, STOCK AND SHARE DEALER,  
3, GREAT ST. HELEN'S, LONDON, E.C.

**MR. ALFRED THOMAS,**  
MINING ENGINEER, AND STOCK AND SHARE DEALER,  
10, COLEMAN STREET, LONDON, E.C.

ESTABLISHED 1862.

**MR. HENRY J. TALLENTIRE**  
has BUSINESS in all MINING SHARES for cash or payment one or two months on.

OFFICES:—21, THREADENEEDLE STREET, LONDON, E.C.  
BANKERS: CITY BANK, Threaddneedle-street.

**MR. J. GRANT MACLEAN,**  
SHAREBROKER AND IRONBROKER, STIRLING, N.B.

Refers to his Share Market Report on page 112 of to-day's Journal.

**MR. E. J. BARTLETT, STOCK AND SHARE DEALER,**  
30, GREAT ST. HELENS, LONDON, E.C.

Selected List of Investments post free on application.

Eighteenth Edition, now ready—"HOW TO INVEST"—post free 12 stamps.

**MR. ALEXANDER DAVIDSON,**  
STOCK AND SHARE DEALER,  
LEADENHALL HOUSE, 101, LEADENHALL STREET, LONDON, E.C.

**MESSRS. ENDEAN AND CO., STOCK AND SHARE** DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1862.

BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

Messrs. ENDEAN and Co. do not advertise shares for sale at fixed prices; but are prepared to supply shares in British and Foreign Mines at the prices advertised by other brokers (if obtainable). They undertake to deliver all shares purchased of them within seven days.

All orders to be addressed as above. Offers may be made.

**MR. W. B. COBB, 29, BISHOPSGATE STREET, LONDON.**

PAYING TEN AND TWENTY PER CENT. CERTAIN.

Immense profits and large dividends. See Circular, price 1s.

TOLLIMA, WESTERN ANDES, and CORP. SOUTH AUSTRALIAN COPPER certain to have a great rise.

ESTABLISHED 1866. THIRTEEN YEARS IN CORNWALL.

**SAMUEL JAMES, STOCK BROKER AND MINING SHARE** DEALER, 14, ANGEL COURT, LONDON, E.C.

Member of the Redruth Mining Exchange.

Those who wish to buy or sell mining shares should consult Mr. JAMES. Mr. J. devotes his entire attention to home and foreign mines, and places his special information at the disposal of his clients. That mining offers undoubted advantages for quick returns no one can deny. Look at the enormous sums of money paid in dividends by home and foreign mines. A large number of wealthy families owe their present proud positions to adventuring in LEGITIMATE MINES. With a better price for metals many of the small priced shares would immediately advance some hundreds per cent. Mines inspected and reported upon by thoroughly competent agents.

There are many mines worth attention, as proceedings of recent shareholders' meetings prove beyond doubt. During the last 40 years there has not such opportunity presented itself as the present for investment in British mines. Metals are certain to advance. In well-informed circles no doubt is entertained on this point. Buyers must not further delay orders.

See Selected List published by S. JAMES, 14, Angel-court, London, E.C.

SPECIAL BUSINESS in the following or part:—

10 Bedford United, 33s. 6d.	42 New Caradon, 3s.	50 Birdseye Creek, 25s.
25 Blue Hills, 3s. 6d.	50 Nth. Penstruthal, 5s.	50 Bratsberg, 37s.
25 Carn Camborne, 14s.	100 Old Shepherds, 5s.	



## THE AMMONIAPHONE.

The discovery of the telephone, the microphone, the phonograph, the photophone, and various other interesting instruments of the same class is supposed to have created in the minds of certain dabblers in science what may fairly be termed a phonic mania, which it seems is now to be turned to medico-industrial advantage by the introduction of the ammoniaphone, an instrument for the production of artificial condensed Italian air. A somewhat extraordinary memoir "on Dr. Carter Moffat's wonderful discovery" of this instrument has been received from Mr. T. Gilbert Bowick, who describes himself as a "Fellow of the Royal Meteorological Society," which may hereafter be designated with equal propriety the Guild of Science in Nubibus, and the discoverer of this marvellous instrument is found, from his cloudy friend's explanation, to be a well-known explorer's son-in-law's cousin, a circumstance which places his scientific attainments beyond question. Mr. Bowick states that his own observations of various districts of Italy have led him to work out a theory in which meteorological science is deeply interested. With the exception of the plains of Lombardy, the Peninsula, taken as a whole, is distinctly of volcanic origin and character. It has been decisively ascertained that free ammonia exists in the air of Italy to a larger extent than even in the atmosphere of many parts of the sea coasts of other countries. A number of the small lakes are also largely impregnated therewith, and, in fact, volcanic ammonia from the lagoons is an article of regular commerce. We may, therefore, he continues, assume that the action of sunlight and heat, largely aided by ozone from the sea air, in conjunction with moisture, sets free the ammonia from the extensive volcanic districts containing a salt of this compound. There is also the formation, collaterally, of an ingredient not previously noticed by philosophers.

As to the explorer's son-in-law's cousin, it appears that whilst in Italy some seven years ago he took the opportunity of making over 70 analyses of the air and dew in various districts, and found in every instance peroxide of hydrogen, and also free ammonia, to a larger extent than exists elsewhere. Dr. Carter Moffat had long previously connected in his mind beauty of tone in Italy and its salubrity as a place for invalids with chemical science, and believed that something in Italian air would be discovered to account for this peculiarity. On returning home he commenced a series of experiments on himself with singularly beneficial results, and after nine years' constant study (some might enquire whether the completion of nine years' study in seven years is not evidence of the "cramming" so much complained of in connection with modern education) he has succeeded in placing before the public an instrument known as the ammoniaphone, which contains an absorbent material saturated with peroxide of hydrogen combined with condensed ammonia and other ingredients, through which a current of air is drawn into the lungs. It is no stretch of imagination to say that this is in reality a highly concentrated artificial Italianised air, in an extremely portable condition. Dr. Carter Moffat's voice was originally very weak, harsh, and destitute of intonation. By the use of the ammoniaphone it has now become a pure tenor of extraordinary range. He noticed that after experimenting on himself for only 14 days an expansion of the chest took place to the extent of over  $\frac{1}{2}$  in., with a feeling of increased lung space and power of voice which has since been maintained. . . . The doctor's voice has been made a tenor of extraordinary range, some 20 notes from the lower F to the high C in the alto, of great beauty, sweetness, and power—the latter note being rung out clear and pure from the chest in the fine devotional air, "I will arise," whence it may be assumed that the explorer's son-in-law's cousin, having determined to arise, Mr. Bowick has kindly volunteered to give him a helping hand.

Logicians have laid it down that he who proves much proves nothing, and probably utilising his knowledge of this Mr. Bowick very properly remarks that the use of the peroxide of hydrogen in the treatment of disease can hardly be looked upon as a novelty in medical science, since in 1860 and 1868 Dr. B. W. Richardson showed that "peroxide of hydrogen relieves the paroxysms of whooping cough, and cuts short the disease more effectually than any other medicine; affords great relief in chronic bronchitis with dyspnea, and in phthisis operates favourably in the early stage by improving digestion, and giving increased activity to the chalybeated remedies, while in the advanced stages it affords great relief to the dyspnea and oppression, acting indeed in this respect like opium without its narcotic effects." Becoming poetic through his high appreciation of Dr. Moffat's discovery, Mr. Bowick declares in conclusion that by means of chemical science we are brought into a fairyland, of which no one knows the extent. We can have, as it were, Italian air laid on at our own doors. The vocalist, the clergyman, the public speaker, and the invalid, all owe Dr. Carter Moffat a debt of gratitude. As a Scotchman, Scotland may well be proud of her son, while other lands can claim him, not as a native but as a benefactor; but readers of the *Mining Journal*, whether they be or be not Fellows of the Guild of Science in Nubibus, will readily comprehend that it is the ironmaster far more than the vocalist or public speaker who will benefit from ammoniaphonic development, since assuming that artificial condensed Italian air is to be laid on to one's own door it is easy to conceive that, even if Dr. Moffat's success be no greater than the late Mr. Holloway's, the demand for iron pipes will be so vastly increased that depression in the iron trade will be known only in history.

## PREVENTING INCRUSTATION OF STEAM BOILERS.

The enormous waste of fuel which results from the attempt to generate steam in a foul boiler has been understood almost as long as the modern system of using steam has been known, and hence innumerable nostrums have been proposed for preventing or removing the incrustation which, with most kinds of water and with certain forms of boilers, is generally regarded as inevitable. The vast majority of these preparations have but very partially answered the object in view, so that when the Disincrustant Marseillais was introduced the inventors had naturally much uphill work to perform in convincing steam users that they had indeed discovered a reliable remedy, and one which was equally applicable in all cases. The material has now, however, had several years' thorough testing, and the satisfaction given has been so general that the justification for the claims made can no longer be doubted—the quantity at present sent out by the manufacturers—Disincrustant Marseillais Company, of Cheetham, Manchester—being now very large, whilst the invariable renewal of orders proves that it is appreciated. One large user writes that since it has been in use in their boilers there has been absolutely no scale formed, all the deposit being in shape of a fine black powder, most of which leaves the boiler through the blow-off, which is opened for a few seconds regularly at suitable intervals. Previous to employing the Disincrustant Marseillais soda had been used in these boilers, and some of the scale then formed, particularly on the top of the furnace-plates was, though thin, very hard, and had not been all removed. This the new compound has almost entirely dissolved or loosened from the plates, and although one of the boilers has been carefully examined, no signs of any injury to the plates has been discovered. The Disincrustant Marseillais has certainly, as far as our experience goes, done its work well, and we understand that it is giving excellent results at sea, the makers, whose factory is at the Knowsley Works, Cheetham, Manchester, informing us that they are doing an extensive business with a number of large shipping companies, and that the compound is also used on numerous stationary boiler plants. The makers claim for their composition, that after all scale has been removed from the boiler plates, a protective surface is formed, which preserves the plates, and does not allow any deposit to collect on them. Of this quality we cannot as yet speak from experience. One point, however, is well worth mentioning—the compound does not appear to in any way affect the boiler fittings, while when soda is being used, particularly in excess, trouble is often experienced with leaky fittings, cocks, valves, &c.

Such testimony as this cannot fail to be satisfactory, for it has been very truly remarked that users of steam-power are unfortunately too familiar with the difficulties and dangers which arise from the formation of scale upon the internal surface of boilers. Some indication of the measure of embarrassment to which they are subject

from this cause is to be found in the innumerable specifics which are advocated and more or less largely adopted for the removal of the evil. It is due in some measure undoubtedly to the multiplicity of these remedies, the utter worthlessness of some, and the proved unsuitability of others to the actual conditions of particular cases that in numerous instances the prevention of incrustation and corrosion is still only "a consummation devoutly to be wished." It is reasonable, however, to expect that among all the compounds offered to the public there must be some that are capable of practically accomplishing what most of them undertake. This patent is a vegetable compound, containing neither free alkali, soda, nor acid, and cannot possibly injure metal. It precipitates all organic matter in the feeding water to the bottom of the boilers, depriving all such substances of their adhesive power, and necessarily deposits them as a soft muddy sediment, which is instantly removed by the blow-off taps, thus rendering the chipping hammer unnecessary. Old incrustation is gradually removed, and eventually disappears altogether. Where pitting or corrosion has set in, this composition is said to be of great value, for it deposits an impalpable thin resinous substance

(a coating) throughout the internal surface of the boiler, which successfully protects the iron from this distressing evil, and promptly arrests it where any symptoms are present. It need scarcely be remarked that at mines and works where the obtaining of good water is practically out of the question, the value of a material which ensures a permanently clean boiler must be inestimable, so that the Disincrustant Marseillais should at least be tested before it is concluded that steam is being generated as economically as practicable.

**EPPE'S COCOA—GRATEFUL AND COMFORTING.**—"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Eppe has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*Civil Service Gazette*.—Made simply with boiling water or milk. Sold only in packets, labelled "JAMES EPPE and Co., Homoeopathic Chemists, London."—Also makers of Eppe's Chocolate Essence.

This Property will command a practical monopoly of the Coa Trade of the Danube, Black Sea, and Constantinople. Income from Contracts offered will amount to £30,000 per annum, equal to over 80 per cent. on the total Capital of the Company after payment of the Government royalty. A further offer has been received to take the whole production of Coal at a clear profit of 10s. per ton.

## The Iron Gate Coal and Chrome Company (Limited).

Incorporated under the Companies Acts, 1862 to 1880, whereby the liability of Shareholders is limited to the amount of their Shares.

**CAPITAL £100,000, IN 100,000 SHARES OF £1 EACH,**

Of which 20,000 are taken by the Vendor in part payment of the purchase-money, and the first issue of 50,000 are now offered for subscription, payable:—5s. per Share on Application, 5s. per Share on Allotment, and the balance, as and when required, in Calls of 5s. per Share, at intervals of not less than three months.

In the event of no Allotment being made, the amount payable on Application for Shares will be returned in full

## DIRECTORS.

Sir GEORGE INNES, Bart., Richmond, Surrey.  
JAMES CROSTON, Esq., J.P., Manchester, and Upton Hall, Cheshire.  
Mr. Alderman JENKINS, Higher Broughton, Manchester.  
T. SAUNDERS, Esq., J.P., Holland Road, Kensington, W.  
Mr. Councillor HUGO SHAW, Manchester.  
THOMAS OLDHAM, Esq., Holmefield, Sale, Manchester.

SOLICITOR—J. H. BOARDMAN, Esq., 41, John Dalton Street, Manchester.  
BANKERS—THE UNION BANK OF MANCHESTER AND BRANCHES.  
(Messrs. GLYN, MILLS, and CO., London Agents.)

AUDITORS—Messrs. JOHN ADAMSON, SON, and CO., Norfolk Street, Manchester.  
SECRETARY (pro tem.)—Mr. F. W. DAWSON.

REGISTERED OFFICES—9, CORPORATION STREET, MANCHESTER.

## PROSPECTUS.

This company is formed for the purchase of concessions granted by the Crown of Hungary, of the mining rights in perpetuity over a district of about 25 square miles in extent, situated on the Danube at Tisovitz and Eibenthal, near the well-known city of Orsova, together with the freehold land at Tisovitz, and the works, houses, offices, and landing-stages erected thereon, and the plant and machinery appertaining thereto, and for working the extensive and valuable deposits of coal and chrome thereon.

The Crown concessions are subject to a Government fee of £2 per annum, and a royalty of 5 per cent. of the net profits on minerals sold and without dead rent, and carry with them the right to fell and use any required quantity of timber, which latter is heavy and abundant. Labour also is cheap and abundant, and there is ample water power for all purposes, and during all seasons.

**COAL.**—This property has been inspected and favourably reported upon by some of the most eminent authorities—namely, Prof. Hull, F.R.S., F.G.S., Director of the Government Geological Survey of Ireland, and previously Government Inspector of Mines in Lancashire, Prof. V. Ball, F.R.S., F.G.S., Director of the Government Geological Survey of India, and Commissioner at the Vienna Exhibition, 1873, Nelson Boyd, Esq., F.G.S., M.E., J. E. Wood, Esq., C.E., F.R.S., Luke Blackwell, Esq., M.E., and others, who state that the coal on this property resembles both in appearance and quality the South Wales steam coal, being peculiarly adapted for use in locomotives, and for steam navigation, a fact that is proved by analysis.

The coal seams are vertical, or nearly so, and crop out on the flanks of the hills, and can be worked by adits, without machinery, for raising or draining. Four of the seams are already proved, and opened out by adit levels. These seams vary in thickness from 4 ft. to 20 ft., and the quality is excellent. Another seam 48 ft. in thickness, is stated to have been discovered, and others are known to exist. It is computed that these seams contain over 100,000,000 tons of workable coal, free from gas or water.

In addition to the ordinary sources of demand for household purposes, railways, flour and other mills, gas, sugar, and glass manufactories, there are on the Danube 1500 steamers, which are in great measure supplied from depots of English coal at Galatz, Ibrail, Varna, and elsewhere.

Prof. Hull and Ball, in their report state from all they can learn, "there is no port on the Danube supplying coal direct from the mines below Tisovitz" (at which the company's wharf is situated) "and, in fact, there is no coal along or near the banks of the Danube below Tisovitz, points of much advantage to this property," and that "the demand for coal at Tisovitz will always exceed the supply."

These collieries, being the nearest cheap source of supply for vessels navigating, and towns upon the Lower Danube, Black Sea, and Constantinople, will have the whole trade open to them, and no English coal can possibly compete on account of freight and charges, which to Galatz amount to 15s. to 20s. per ton, whilst it is estimated the total cost to this company for coal delivered free on board will not be more than 5s. per ton. The selling price of steam coal at Galatz is stated to be about 35s. per ton, and for native coal further up the river 21s. to 33s. per ton. The supply from the collieries can easily be made equal to 2000 tons per week, and deliveries commenced forthwith.

Coal is sold for cash on delivery at the wharf, but the demand is such that it is frequently paid for considerably in advance of delivery.

The directors have already received an offer of contract for 20,000 tons of this coal per annum, for three years, with a clear profit to the company of 10s. per ton. A further offer has been received to take all the coal that can be delivered at the same rate of profit.

Prof. J. Emerson Reynolds, F.R.S., Royal Dublin Society, gave the following analysis of coal from this property:—Moisture, 0.51; volatile hydrocarbons, 14.32; fixed carbon, 75.86; sulphur, 0.18; ash, 9.13.

**CHROME ORE.**—The deposits of chrome ore on the property are prac-

tically inexhaustible, and of great richness. Mr. J. E. Wood, C.E. F.R.S., states that of the 19 sections into which this property is divided, 15 contain extensive veins of chrome ore, from 3 ft. to 84 ft. in width, and that in five of the sections the ore contains from 50 to 65 per cent. of oxide of chromium. The present value of ore containing 42 per cent. of oxide, in England, is about £7 per ton.

The chrome ore crops out on the surface, and can be worked in open quarry, and the simple process of hand-picking would suffice to ensure a large immediate delivery, very little capital being required, except for actual wages. The inspecting engineers concur in stating that the chrome ore can be delivered on the Danube, free on board at 5s. to 6s. per ton. A firm contract is already offered for 10,000 tons per annum, for three years, with a clear profit to the company of £2 per ton.

## ASSAY OF CHROMITE TAKEN FROM THIS PROPERTY.

2, Lombard-street, E.C.  
"I hereby certify that I have submitted a sample of chromite (chrome iron ore) handed to me to chemical analysis. I find it to contain 52 per cent. of sesquioxide of chromium. I may further state that should this mineral exist in the quantities represented, that this property is a most valuable one."  
(Signed) J. MAC IVOR, Consulting Chemist and Mineralogist.

Analysis of Herr LOUIS VON MAADIESPACH, Chief Assaying Department, Oravitz.

Chrome ironstone, 50 to 56, and from 29.6 to 46.28 chrome oxide; silver alloyed copper, 17 $\frac{1}{2}$  per cent. copper; 62 to 260 ozs. of silver per ton; red ironstone, 57 $\frac{1}{2}$  per cent. of raw iron.

The contracts before referred to show an assured revenue per annum, as follows:—From 20,000 tons of coal at 10s. per ton, profit, £10,000; from 10,000 tons of chrome, at 40s. per ton, profit £20,000; total, £30,000.

But beyond this, the demand for coal on the Danube, and for chrome in England, America, and on the Continent being continuous and increasing, and the sources of supply of the latter being few, a ready sale at highly remunerative rates may be always relied upon for a much larger output.

In addition to the coal and chrome, there are on this property vast masses of spathic iron ore, brown hematite, and black band ironstone, and extensive ramifications of argentiferous copper and other minerals, which constitute it one of the most remarkable mining fields in Europe. These rights the directors propose to sell for the benefit of the company as way may open, and to confine their operations to the coal and chrome as sources of immediate revenue, free from risk, or anything of a speculative character, or involving large expenditure on plant.

The capital required for additions to plant is very trifling, consisting almost exclusively, as to coal, for wagons to run on the tramway from the adit levels to the wharf; and, as to chrome, for dressing machines, which will, it is estimated, be covered by an expenditure of about £2000.

The expenditure on plant will be strictly limited to the above-mentioned items, and no further expenditure on plant account will be incurred except out of profits.

The purchase money agreed to be paid for the estate and mineral rights is £60,000, to be paid or satisfied as follows, viz., £16,000 in cash, £20,000 in fully paid-up shares, and the balance in coal and chrome from the property. No promotion money has been or will be paid by the company, as all expenses of formation up to the first allotment will be paid by the vendor.

The only agreements entered into are one dated 23rd October, 1883, and made between Thomas Bryant of the one part, and F. G. Dawson of the other part, and one dated 1st December, 1883, and made between F. G. Dawson, of the one part, and Henry Lepiow, as agent for and on behalf of the company of the other part.

Copies of the reports, memorandum, and Articles of Association, and of the agreements above-mentioned can be seen at the offices of the company's solicitor. Prospectuses and forms of application for shares may be obtained from the solicitor, auditors, the bankers, and also at the offices of the company.



SUBSCRIPTION LIST WILL BE CLOSED ON WEDNESDAY, 30TH JANUARY INST.

Believed to be the Richest Gold Mine discovered for many years; easily accessible, and within only two days' journey of England. A considerable quantity of lode was broken, at 60 ft. deep, well mixed, and samples of about  $\frac{3}{4}$  of cwt. each taken, which have assayed from nearly 3 ozs. to 8 ozs. per ton; other large samples 30 to 1500 ozs. per ton. Some very rich samples can be seen at the office.

# THE OSCAR GOLD MINING COMPANY

(LIMITED).

(Incorporated under the Companies Acts, with Limited Liability.)

CAPITAL £75,000, IN 75,000 SHARES OF £1 EACH.

Payable 2s. 6d. with Application, 2s. 6d. on Allotment, and the remainder, if required, by instalments not exceeding 2s. 6d. each. (Of these Shares, 32,500 will be allotted to the Vendors on account of the Purchase, but will not be transferable until a Profit has been made sufficient to pay at least 10 per cent. on the amount paid up on the remaining Shares, as mentioned in Paragraph 11 of the Prospectus.) (If no Allotment is made, the deposits will be returned in full).

DIRECTORS.

WM. DUNN, Esq., Director

J. H. MURCHISON, Esq., F.R.G.S., CHAIRMAN

SAMUEL YORK, Esq., Director

Captain JOHN DAW, Manager of the Bratsberg Mines, Norway.

Major ROBERT HEANE, Junior United Service Club, and Franklands, Burgess Hill, Sussex.

(With power to add two more).

BANKERS—IMPERIAL BANK (LIMITED), Lothbury.

SOLICITORS—HENRY VERDEN, Esq., 14, Great Winchester Street, E.C.

SECRETARY (PRO TEM.) AND OFFICE.

MR. C. HARRISON, SMITH, 8, AUSTIN FRIARS, LONDON, E.C.

A Report by Captain Plummer, the eminent mining authority, accompanies the Prospectus, and the following extracts from it will best describe the nature and value of the mine. He says:—

"I had three shots put in (at 60 ft. deep), and after properly mixing the ore brought down by these shots I filled two boxes. I may here remark I saw good specimens of gold quite visible to the naked eye. One box of samples I took from the very fine smalls after the shots, and one box of smalls before the shots were fired. Another sample was taken 48 ft. down from surface in the south-west end; it is mineralised slate.

"One sample was taken from the mineral slate at surface, 150 fms. south-west from shaft. All of these samples gave a good show of gold except the last. The ore taken before the shots were fired was very rich in good coarse grain gold.

"I saw at this mine what I never saw before in all my travels—that is, a branch of gold visible to the naked eye, when standing in the rock underground. In the south-west end of the shaft, and about 10 ft. above the bottom, the lode is 3 to 4 ft. wide; in one part of it the gold can be seen and felt projecting from the rock.

"Had this been an established gold mining field one would scarcely know how to fix a value upon it; some parts of the lode are fabulously rich, and this of itself must give it great intrinsic value. Moreover, if the samples I sent you give satisfactory results when assayed, taken from the lode indiscriminately as they were, there can be no need for hesitation.

"I can with the greatest confidence recommend this property. I have never before seen so rich a vein for gold, and if it continues to hold on, as I have every reason to believe it will, there must be a brilliant future for the mines. Should you decide on taking over and working the property, I shall be glad if you will allow me to take an interest in it.

"I have not taken into account the gold you will be likely to get from the present workings immediately the stamps, &c., are completed, as although this of itself will yield a handsome return, I look upon it as of small moment compared with the magnitude of the profits which should be realised when the mine is in full operation.

Captain Plummer adds this Postscript:—

Since writing the report I have seen the result of the assays made by Mr. F. Claudet (Assayer to the Bank of England) of two boxes containing fair samples of lode from the deepest point of the

mine. These give respectively  $\frac{2}{10}$  13 0 or an average of (say)  $\frac{8}{10}$  0 0

5 ozs. of gold to the ton. As my calculations were based on the average of only 1 oz. to the ton, and the cost of extracting the gold is, of course, the same, whatever the yield may be, it will readily be seen how very largely the profits would be increased, basing the calculation on an average of 5 ozs. gold per ton, instead of 1 oz.

B. D. P.

The vendors have handed to the directors copies of Certificates of Assays of stones and samples from the lode, varying in weight from a few pounds to upwards of 3 qrs., made by Messrs. Johnson and Matthey, giving the extraordinary results of 32 ozs., 93 ozs., 101 ozs., 370 ozs., 417 ozs., 1075 ozs., and 1510 ozs. of gold per ton; but these must be considered as selected specimens.

Some very rich specimens can be seen at the office.

There are no rents nor royalties to pay, which of itself is an important consideration.

The only agreements entered into are one dated 24th November, 1883, between the said John Daw of the one part, and the said John Henry Murchison of the other part. The other dated 10th December, 1883, between the said John Henry Murchison of the one part, and Charles Harrison Smith, as trustee for the company, of the other part; which said agreements, together with the Articles of Association, can be inspected at the company's office, and applicants for shares will be taken to have notice of the contents thereof.

Copies of this Prospectus, with Captain Plummer's report and Forms of Application, can be obtained at the office of the company, 8, Austin Friars, London, E.C.

## CARTAGO (LIMITED).

ABRIDGED PROSPECTUS.

No cash whatever is payable for this valuable property or the work executed.

The vendor, convinced of the value of the enterprise, takes the whole of the purchase-money in shares.

The "Cartago" Gold Mine will, it is considered, prove to be one of the richest mines ever discovered in Venezuela since the discovery of the wonderful EL CALLAO, and so satisfied of this is Mr. A. LICCIONI (Chairman of EL CALLAO, under whose management it has become the most productive gold mine in the world), that he has accepted a directorship of CARTAGO, Limited—the only English mining company in all Venezuela with which (after a long residence in that country) he has allowed his name in any way to be associated.

The original shares in "El Callao," of the nominal value of £420 are now wanted at £44,000 each, and the dividend paid for the month of September alone was £800 per £420 share, equal to over £9000 per annum per share.

OPENED ON MONDAY, the 28th INST., and Allotments will be made according to priority of application.

In the opinion of those who have seen the "Cartago" Mine it is likely that it may eventually not only rival "El Callao" in wealth, but outlive it in productive power.

The following are the leading features in the "Cartago":—

1st.—The reports are of a highly favourable character as to the richness of the property.

2nd.—The most conclusive evidence of its value is that the vendor takes all the purchase-money in shares, therefore his interest depends solely on the success of the company.

3rd.—A further corroboration is that Mr. A. Liccioni, Chairman of "El Callao," not only accepts a seat on the Direction of Cartago, but in a letter annexed says:—"My own experience leads me to believe it is very rich. I have not the slightest doubt of good results."

4th.—These remarks, from so reliable and so responsible an authority, speak for themselves, especially as Cartago being only six miles distant from "El Callao," Mr. Liccioni had every opportunity of obtaining reliable information thereon. The gold

shipped from "El Callao" to Messrs. Baring Bros. from January till September of last year, exceeded £336,000 sterling—only nine months' yield.

5th.—"Cartago" possesses the only site for water-power known to exist in the gold fields, sufficient to drive a 50-horse turbine wheel for eight months or 10 months of the year; and this is an advantage of so great magnitude that it is impossible to over-estimate it; fully a saving of 50 per cent. in working expenses, as compared with those of other mines in the locality.

6th.—Another great advantage is that Mr. Liccioni's association will secure skill and efficiency in local management, which are so essential to the prosperity of every enterprise.

7th.—It must be remembered that the average yield of gold in the ores of the district may be taken as nearly double that of those of any other known gold field.

By crushing 100 tons (2 ozs.) ore per day, the estimated profit would be £165,000 per annum.

If 3 ozs. per ton of ore (only two thirds "El Callao's" yield, the profits should be..... 227,000 ..

# CARTAGO, LIMITED.

Incorporated under the Companies Acts, 1862 to 1880, which limit the liability of subscribers to the amount of their Shares.

SHARE CAPITAL £300,000, IN 300,000 SHARES OF £1 EACH,

Payable 2s. 6d. per Share on Application, and 2s. 6d. on allotment, and the balance, as and when required, by calls not exceeding 2s. 6d. per Share, and at intervals of not less than two months. It is expected that not more than 5s. to 10s. per Share will be called up during the first twelve months.

DIRECTORS.

The Right Hon. Lord CLAUD HAMILTON, P.C., CHAIRMAN.

A. LICCIONI, Ciudad Bolivar, Venezuela, Chairman of El Callao.

Sir WALTER BLOUNT, Bart., Deputy-Lieutenant for the County of Worcester, Brooks's Club, S.W.

The Hon. WILLIAM ANNAND, late Premier of Nova Scotia, Thorndean, Streatham, S.W.

Major W. F. DESPARD, Director Mackay and Revolution Mining Company (Limited).

J. DUNHAM MASSEY, Esq., Director West Callao Gold Mining Company of Venezuela.

CHARLES RAWLE, Esq., Padstow, Cornwall.

BANKERS IN LONDON—THE CONSOLIDATED BANK (LIMITED), 52, Threadneedle Street, London, E.C.

BROKER IN LONDON—WILLIAM R. HEWITT, Esq., No. 2, Pinner's Court, Old Broad Street, and Stock Exchange, E.C.

SOLICITORS—MESSRS. HARPER AND BATTCOCK, 23, Rood Lane, London, E.C.

CONSULTING ENGINEER—J. A. SKERTCHLY, Esq., F.R.G.S., M.E., and C.E.

SECRETARY—MR. F. J. WARNER.

OFFICES—43, NEW BROAD STREET, LONDON, E.C.

Cartago is situate in the Province of Guyana, in the United States of Venezuela, S.A., about six miles in a direct line from "El Callao," and comprises an area of 650 acres, or thereabouts, subject to only a small annual rental of £60 per annum. The concession is held for a term of 50 years, renewable.

Copy Letter from A. LICCIONI, Chairman of "EL CALLAO."

[Copy Translation.]

"DEAR SIR,—You ask me my opinion respecting the concession named 'Cartago.'

"Cartago is situated in the valley of the Mocupia, and the experience of the miners who have prospected it and who are still extracting alluvial gold (or de flor de greda) is, that it is the richest in the region.

"My own experience leads me also to believe that it is very rich.

"I am the Chairman of the National Union Company, which is spending large sums in the same valley, at a short distance from Cartago, and, therefore, I have not the slightest doubt of good results.

"Yours truly,

A. LICCIONI."

Wood and water power, the two essentials of economical and successful mining, are in abundance, and the enormous expense (and consequent loss of profit) unavoidable with other companies using steam machinery, &c., may be saved by this company, and turned into dividends.

With the enormous advantages under which this company commences operations, having practically nothing to pay for its property, with its capital intact for working purposes, with the Chairman

of the richest gold mine in the world as its local adviser, there is scarcely room for doubt that its shares will return large dividends, and increase rapidly in intrinsic value, and more particularly as no steam-power will be required to treat the ores, owing to the plentiful supply of water as compared with any other mine in the locality, even including El Callao. This alone should ensure a saving of at least 50 per cent. in working expenses.

The only contract is one dated 21st December, 1883, made between Mr. James Thompson, of the one part, and Mr. F. J. Warner, acting on behalf of Cartago (Limited), whereby the property is conveyed for 100,000 fully paid-up shares.

In the event of no allotment being made the deposit paid on application for shares will be returned in full.

Prospectuses and Forms of Application can be obtained at the offices of the company, and from the brokers and solicitors.

Written applications, stating the number of shares required, accompanied by a remittance of 2s. 6d. per share, will be received.

## CARTAGO (LIMITED).

Mr. A. Liccioni, Chairman of "El Callao," has accepted a seat on the direction of "Cartago."

As the extraordinary yield of "El Callao" is not generally known, it will be interesting to give the returns of gold during the past eight years (vide their reports):—

In 1875 produced	31,278 ozs. of gold, value	£119,508
1876	" 42,542 "	162,545
1877	" 48,168 "	184,041
1878	" 49,638 "	189,658
1879	" 40,308 "	164,010
Gold bars shipped to Messrs. Baring Brothers, bankers, London:—		
In 1880 were	53,605 ozs. of gold, value	£201,020
1881	" 64,862 "	248,230
1882	" 104,611 "	392,290
In January, 1883, Messrs. Baring Brothers, received	10,245 ozs.	
February	" " " "	7,592 "
March	" " " "	8,536 "
April	" " " "	11,273 "
May	" " " "	10,984 "
June	" " " "	10,489 "
July	" " " "	9,058 "
August	" " " "	15,659 "
September	" " " "	13,005 "

Total..... 86,841 ozs..

Equal to £336,508 for nine months' working.

The dividend for the month of September was £830 per £420 share, and the present value of the £420 shares is £44,000.

In the opinion of those who have seen "Cartago" it is likely that it may eventually not only rival "El Callao" in wealth, but outlive it in productive power. In mineral extent it is five times larger than "El Callao."



## Meetings of Public Companies.

## GOLD COAST MINING COMPANY.

An extraordinary general meeting of shareholders was held at the Guildhall Tavern, on Jan. 18.—Capt. MOLESWORTH, R.N., in the chair, for the purpose of considering and, if approved, passing the following special resolutions:—

1. The word "work" in the seventh line of Article 24 of the Articles of Association of the company is hereby repealed.—2. The number "18" in the second line of Article 25 of the Articles of Association of the company is hereby repealed, and the number "19" is substituted therefor.—3. The number "68" is hereby added at the end of Article 68 in lieu of the number "97," which is hereby repealed.—4. The words from "Subject" to "hereof," both inclusive, at the commencement of Article 82, are hereby repealed, and the words "Subject to clause 70 hereof" are substituted therefor.—5. Article 91 of the Articles of Association of the company is hereby repealed, and the following Article is substituted therefor:—"91. At the ordinary meeting in the year 1884, and in every subsequent year, two of the directors for the time being shall retire from office. The directors to retire in every year shall be the two senior directors on the board, and shall be eligible for re-election."—6. The words from "the appointment" to "fixed period," both inclusive, at the end of Article 94 are hereby repealed.—7. That the report of the committee of enquiry be adopted.—8. That Mr. Fitzgerald's seat on the board be declared vacant.

The SECRETARY read the notice calling the meeting.

The CHAIRMAN said he would call upon the solicitor to read the resolutions, and explain the alterations.

The SOLICITOR explained the alterations proposed to be made, some of which were mere printer's errors.

The CHAIRMAN then moved, in succession, the adoption of resolutions 1, 2, 3, 4, 5, and 6.—These were seconded and carried without discussion.

With regard to No. 7, on which it was anticipated that some discussion might arise, it was unanimously decided to pass it by for the moment and proceed with No. 8.

The CHAIRMAN then proposed the adoption of resolution No. 8.—That Mr. Fitzgerald's seat on the board be declared vacant.—Mr. STEWART seconded the motion.

In reply to a question it was stated that Mr. Fitzgerald had not sent in his resignation direct, but had sent it through an agent.

The SECRETARY: He has practically resigned, but not legally.—The resolution was carried unanimously.

The CHAIRMAN said the above resolutions must be confirmed at a future meeting, but a sufficient time would be given between this and the confirmatory meeting to give the legal time for any gentleman to send in the name of any shareholder whom he might wish to propose as a director.

With regard to resolution No. 7.—That the report of the committee of enquiry be adopted, he had to state that the directors wrote to 13 of the largest shareholders asking them to come and enquire into things, so as, if possible, to give confidence to those shareholders who, not knowing both sides of the question might have the benefit of such report from some of their largest and oldest shareholders.

Of the 13 so invited only two appeared: one of those two gentlemen thought that the matter had better be settled at this extraordinary meeting which was held to-day, and the other gentleman (Mr. Gunn) decided that he would not take the responsibility of drawing up any report himself.

There the matter rested now without the shareholders having had the benefit of any investigation, beyond the reply which the directors made to the shareholders. He might say that in the usual course of events, after the directors had received the accusations of Mr. Joy, and replied to them, it would have been their course to have left Mr. Joy to have answered that reply, but as Mr. Joy had since sent out another circular, in which he stated that he could substantiate everything which had been brought forward, with the exception of the paragraph about the secretary, for which he made an apology, he (the Chairman) had now to state that the board were prepared at this meeting to answer all Mr. Joy's accusations, and to bring proof from Mr. Joy's own letters, and from the letters of others, to show that Mr. Joy's statements were incorrect. But it seemed to him that the great matter they had to look to was the interest of the company, and not to these personal matters. (Hear, hear.)

A SHAREHOLDER: It would ruin the company to go into them.

The CHAIRMAN said that, at the same time, the directors were fully prepared to go into every one of them. They had letters which showed the utter incorrigibility of Mr. Joy's statements. Mr. Joy had apologised, and said he was not listening at the board when some of the statements were made and published, and admitted he had made mistakes. But the board, as he had said, were prepared if it was thought right to go into the whole of the statements now before the shareholders. (No, no, and hear, hear.) In the meantime he would say something about the prospects of the mine.

Mr. JOY said the Chairman would be entirely out of order if he did not conclude by moving the adoption of resolution No. 7. He wished it to be moved as he had an amendment to move upon it. At the board meeting yesterday the Chairman stated he was determined that no business should be done with respect to resolution No. 7.—The CHAIRMAN: No, no.

Mr. JOY said the object of that determination was to shut out his amendment. He maintained that due notice had been given of resolution No. 7, and that the Chairman was bound to move it, and someone to second it, and then he (Mr. Joy) could move an amendment and make the explanations which he wished to make. If the Chairman would not move resolution No. 7 he suggested that some public-spirited shareholder should do it.

The CHAIRMAN: It would be useless to move the resolution, as there was no report made by any committee, and the thing has fallen to the ground by itself. (Hear, hear.) I propose to state to you something with regard to the prospects of the company, which are alluded to in the first paragraph of Mr. Joy's circular, and I think such a statement from me would be far more interesting to the meeting than going into the other portions. (Hear, hear.)

A SHAREHOLDER: It would be an obvious folly to propose such a resolution, as no report has been made by any committee, but I think it is desirable we should hear some explanation on the part of Mr. Joy, on the one hand, and an answer from the Chairman on the other. (Hear, hear, and no, no.)

A SHAREHOLDER: I think you should move that Mr. Joy's act is an improper one.

Mr. JOY: You cannot move anything of which notice has not been given.

A SHAREHOLDER: It would be a sad waste of time to go into these matters. (Hear, hear.) I propose that we hear from the Chairman a statement as to the prospects of the company.

Mr. MONTIFIORE thought the whole of the papers which bore upon this subject should be placed in the shareholders' hands. The whole matter appeared to him to be disgraceful. The shareholders seemed to have been misled by misrepresentations. They had the directors quarrelling.

The CHAIRMAN: We are not quarrelling. (A laugh.) One has been quarrelling.

Mr. MONTIFIORE: We were told on the last occasion that we were in a proper state. What state are we in now?

Mr. ORLANDO WEBB: Let us understand the position we are in. The true position is this:—We are called together as an extraordinary general meeting to consider certain special resolutions. These resolutions have been dealt with with the exception of one, and it is clear, on the statement of the Chairman, that the resolution cannot be dealt with, inasmuch as there is no report of a committee to adopt. (Hear, hear.) How can you confirm or adopt a report which has not been made? (A laugh.) The business of the meeting is really terminated. (Hear, hear, and no, no.) I speak in a legal sense when I say that the business of the meeting is terminated. Of course, gentlemen now present at this meeting can raise any discussion they please, but quite understand that that any resolution which you propose now is no resolution at all. (Hear, hear.)

Mr. WEBB: You may pass a resolution and express an opinion. I will express an opinion. I do not go into one side or another; I know nothing about some of the questions. There has been no enquiry; I think there ought to have been. (Hear, hear.) I very greatly regret the notice calling the meeting did not go on to say that at this time it would have been open for anyone to propose a committee to enquire into these matters. (Hear, hear.) At all events we have no committee, and we have no power at the present time to appoint one. The business, as I have said, has terminated, but it is quite open to us to discuss any matters we may think proper. I should be glad to hear from the Chairman any statement he can make with respect to the prospects of the company, and I think the gentlemen present would desire to hear that. (Hear, hear.) I suggest also, that seeing the disputes which have taken place, and are taking place between the board of directors, I think that as a board, they are bound, in credit to themselves, to resign, and simply to hold that position until another meeting shall be called to appoint other directors; and in the meantime let a committee of enquiry be appointed, and let that committee have power and have the opportunity to recommend the appointment of gentlemen as directors. Quite understand this—I do not for a moment say that anyone of the directors shall be displaced. It is a matter of enquiry. The general body of the shareholders would feel that the Chairman is entitled to his seat. (Hear, hear.) Whether the other gentlemen are it is not for me to say; it is a matter for public enquiry, but when the enquiry has taken place I think the directors should assure us that they are willing to obey, and will help us to appoint such directors as we think proper.

A SHAREHOLDER said he believed the people in Liverpool would not ship the stores till they knew the result of this meeting. The company was short of cash, and if they let things go quietly, and had no committee of enquiry, they might get what they wanted.

Mr. JOY said he thought the object was to prevent him from moving his amendment.

The CHAIRMAN said he had stated that the directors were willing to place their seats at the disposal of the shareholders, awaiting enquiry. The position of the directors had not been a bed of roses. If they thought he wished to continue in the position of Chairman they were very much mistaken; but he was a very large shareholder, and, in the interests of the company, he should like to see peace restored, and confidence given in the company so that they might be able to go on with the company, which appeared to him to be in a most prosperous state, although the funds were low, and it was difficult to arrange matters in consequence of the course taken by Mr. Joy. The directors were as much disappointed as the shareholders.

A SHAREHOLDER suggested that a simple plan to adopt would be to strike out clause No. 7.

Mr. WEBB: It is a mistake to bring this matter forward. We should have a calm and quiet enquiry by two or three individuals, who will ascertain if there is anything wrong or not. (Hear, hear.) I have no reason to suppose that anything is wrong, but I think there ought to be an enquiry of that kind. I think the difficulty might be got over in this way, if you were to move something to this effect:—That there having been no report from any committee, that resolution No. 7 be not put. Then Mr. Joy would have an opportunity of moving an amendment.

A SHAREHOLDER: If there was no report why was that clause put in the circular?—The CHAIRMAN: The notice was obliged to be sent out at a certain number of days beforehand. At the time that was printed we sent to 13 shareholders, none of whom were known to me personally, and we thought that

there would be sufficient interest shown by some, at least, out of the 13 to attend a meeting and make a report. We expected that surely five would have attended.

Mr. JOY: I was asked to attend as one of the largest shareholders, but I declined to do so as Mr. Joy declined to appear.

A SHAREHOLDER: We have heard that the directors are willing to place their seats at the disposal of the shareholders; may I ask whether Mr. Joy is prepared to do the same thing?—Mr. JOY: Yes.

The CHAIRMAN: I am glad to hear it; it will clear the way. I think there are some gentlemen who think it is best to cut these proceedings as short as possible. (Hear, hear.) There must be some gentlemen present who would associate themselves with me and form a small committee.

Mr. WEBB said that the proceedings of any committee would be illegal; that was to say, the committee could not bind the company.

The SECRETARY said he believed the directors agreed to abide by any resolution which might be passed.

Mr. SNOW, as representing 5000 or 8000 shares, said it would be better to hear what Mr. Joy had to say.

The CHAIRMAN said the board had no desire whatever to shrink from any investigation.

A SHAREHOLDER said it would be better to hear from the Chairman how the company stood financially, and what were the position and prospects of the company.

The CHAIRMAN said the directors had sent out Mr. Haughton to the mine to report upon matters, in consequence of Mr. Gowans not being able to extract the gold. He believed there was most valuable ore there, but the reason why Mr. Gowans was not able to extract the gold he could not say. By the last letters from Mr. Gowans he had sent home some ore which contained 9½ ozs. and 7½ ozs. respectively. This ore had been submitted to Mr. Knight, an eminent analyst, of Liverpool, who had stated he was quite sure the ore could not be picked, because when he examined it microscopically he was not able to find traces of gold. Mr. Knight had assayed the ore, and had found 9 ozs. of gold and 7 ozs. of gold respectively. The samples assayed were from 10 to 12 lbs. The directors had also letters from Mr. Knight saying how the gold might be extracted. They were aware that the fineness of the gold had been a great difficulty with the reduction officer, and, therefore, the directors had sent out Mr. Haughton, who was a most experienced miner, he having come home from Australia, and been consulted by persons who were bringing out a patent by which he believed they were able to get out of the ore 92 per cent. of the gold assayed. Now, if this company had ore which assayed 9 ozs. and 7 ozs. to the ton respectively, surely that could not be a bad mine. (Hear, hear.) If the Indian gold mines had shown only 1 oz. of gold to the ton, where would their shares have been now? The directors had that day received a letter from Mr. Haughton, which later on he would ask the secretary to read. In it he gave an opinion that Mr. Gowans's work was not satisfactory. As regarded the financial position of the company it was this:—The directors had not only been disappointed because the gold had not come home, but they had also been disappointed because they had not been able to collect the money which ought to have come into the company from shareholders who had been unable to pay their calls. That had been a great difficulty, but the directors had endeavoured to battle with it in every possible way. The board had been acting under the advice of the solicitor, and if they had forced matters more than they had, but very little time to report. When Mr. Haughton was asked to call upon the directors, he had been told that the directors had a large interest, and were anxious to see the mine a success. He believed at the present moment the mine was the best on the Gold Coast. (Hear, hear.)

The SECRETARY then read the letter from Mr. Haughton, which is reported in another column.

A long and uninteresting discussion then followed regarding the appointment, and eventually, with the full concurrence of the directors, Mr. NIXON proposed an informal resolution for the appointment of a committee to enquire into the questions raised in Mr. Joy's circular, and those raised in the directors' circular, and other matters connected with the working of the company and other matters which might be brought before it.

Mr. VAN AGNEW seconded the motion, which was put and carried.

Some further time was occupied in deciding who should form the committee, but eventually the following five gentlemen were appointed:—Messrs. Gunn, Orlando Webb, Sals, Snow and Nixon.

A vote of thanks was passed to the Chairman for his conduct in the chair, and the meeting terminated.

## ARUBA ISLAND GOLD MINING COMPANY.

The adjourned ordinary general meeting of shareholders was held at the Guildhall Tavern, Gresham-street, on Monday,

Mr. WIDDECOMBE in the chair.

The CHAIRMAN having read the notice convening the original meeting, said the shareholders would probably be aware that the meeting was adjourned on the last occasion of their assembling in order that the accounts for the year 1882 might be more completely made out and audited for their satisfaction than they then were.

He was happy to say that since that time the accounts had been audited by Mr. Ford, the duly appointed auditor of the company, and he (the Chairman) could not do better than read the certificate which Mr. Ford had appended to the balance-sheet, which was made up to Dec. 31, 1882, commencing from the incorporation of the company about 10 or 11 years previously. This certificate stated that Mr. Ford had compared the books of the company with the balance-sheet, and had found them agree. He also certified as to the debentures and as to the stores. The Chairman (continuing) said it was suggested at the meeting held recently that the accounts up to the end of 1883 should be prepared and presented to the adjourned meeting, and he was happy to say that after some difficulty, and the expenditure of a good deal of time and trouble they had succeeded in getting the balance-sheet made up to Dec. 31 last. Mr. Ford had gone through this balance-sheet with a great deal of care, and had initially it as correct, and as soon as he was appointed auditor for that year (which he was not at present) he would no doubt have no objection to certify the correctness of the balance-sheet as the auditor of the company.

A SHAREHOLDER asked that the statements should be read.—The CHAIRMAN said the accounts to the end of the past year had only been in his possession for a short time, and he could not read them to the shareholders.

Mr. SOLIAGUE thought the shareholders would like to see the accounts before they passed them.—The CHAIRMAN said that, as a rule, the accounts had never been presented until the meetings.—Mr. SOLIAGUE did not know any other joint-stock company where such a practice was adopted as in this company.

The CHAIRMAN added that the accounts had always been presented at the meetings in manuscript, as the articles only required that the accounts should be presented at the meetings, and this had invariably been done. The Chairman then proceeded to read the accounts.

A SHAREHOLDER: What does the company owe now?—The CHAIRMAN: About 2000*l.*, including the outstanding debentures. Proceeding with the reading of the accounts, the Chairman pointed out that for four years the directors worked for nothing, and when they did take any fees they took them in preference shares at par, some of which he had since sold at 75 per cent. discount. The company had now to its credit about 175*l.*—Mr. E. S. EVANS asked whether it was correct, as the accounts seemed to imply that the directors had taken 700*l.* since the year 1882.

The CHAIRMAN replied that they had taken 100*l.* a year each as decided at a meeting of the shareholders.

Mr. DAWSON (a director) said the late secretary (who died a short time ago) had been paid 150*l.* out of the 700*l.* Then there was office rent and various minor expenses. He had always thought it a most absurd arrangement that the accounts should be so late in being presented; and, therefore, every effort had been made to present the accounts for 1883 as early as possible.

Mr. EVANS, asking that the accounts should be printed before presentation, said he was asking what was done by every joint-stock company in the United Kingdom that he knew anything of.—Mr. DAWSON said the accounts had never been presented in this company's history.

The CHAIRMAN, after some further conversation on the same subject, said he had already at the previous meeting made all the remarks he thought necessary on the report; and, as he had now read the accounts, he moved that the report and the accounts to Dec. 31, 1882, should be approved.—Mr. EFFINGHAM WILSON seconded the motion.

Mr. DAWSON asked whether there had been any change in the balance-sheet to the close of 1882 since it was presented at the meeting of which the present was the adjournment?—The CHAIRMAN replied that none of the figures had been changed. What had been done was to put the figures in ink instead of in pencil.

A SHAREHOLDER: Is there sufficient money in hand to meet the debts of the company?—The CHAIRMAN: Yes; quite, with all the accumulations of interest. We shall be very happy to pay you to-morrow. (Hear, hear.)

Mr. DAWSON said that some of the dividends had not been sent in for conversion, but the funds in hand were sufficient to meet those bonds with the coupons on them. He thought that ought to be considered a very satisfactory state of their affairs. (Hear, hear.) If the shareholders knew the difficulty there had been in pulling the thing through they would consider that the directors' management had been eminently satisfactory. (Hear, hear.)

Mr. EVANS moved, as an amendment, "That the accounts be not passed until they have been printed and circulated amongst the shareholders, and that the meeting be adjourned for a week." He (Mr. Evans) added that Mr. Ibbotson and himself held more shares than the board or any other shareholder.—Mr. IBBOTSON seconded the amendment.

Mr. DAWSON said that as soon as the directors had got the company through the breakers into smooth water there was an intense interest shown in the company; but while their efforts were less successful, it was exceedingly difficult even to get a quorum of shareholders to attend the meetings. (Hear, hear.)

He added that the accounts for 1882 would have been audited for presentation at the last meeting but for the unfortunate death of the late secretary.

Mr. IBBOTSON said he was particularly anxious not to have any discredit on the board; he thanked them sincerely for what they had done. He considered that a short adjournment would be in the interests of all concerned.

Mr. EVANS said the reason he was now taking so much interest in the company was that he saw there was something in it. (Laughter.)

The amendment upon being put was lost. A poll was thereupon demanded, which it was arranged to take on Wednesday and Thursday, the result to be declared at an adjournment of the meeting, to take place at the Guildhall Tavern, at 4 p.m., on the latter day.

At the adjourned meeting on Thursday, the Chairman announced that the amendment was lost by a majority of 9155 votes.

The CHAIRMAN then put the original proposal:—"That the report from the directors of the company, and the audited accounts to Dec. 31, 1882, be approved."—The resolution was carried unanimously.

Mr. J. B. FORD was appointed on the audit for the past year, and Mr. A. B. Ibbotson was unanimously elected a director of the company in the place of the director vacating office.

Mr. R. S. EVANS proposed, and Mr. J. V. SNEEDLEY seconded, a vote of thanks to the board, it was carried unanimously.

The CHAIRMAN returned thanks, and the meeting terminated.

## VICTORINE GOLD MINING COMPANY.

A special general meeting of bondholders was held at the Cannon-street Hotel, on Wednesday,

Mr. SAMUEL POPE, Q.C., in the chair.

To consider the position of the bondholders, and the best steps to be taken to promote their interests.

The CHAIRMAN said: Gentlemen, the new company that was established under the scheme which was sanctioned by the Court of Chancery did me the honour to elect me as Chairman, therefore I am here in that position now. The cause of our meeting to-day is that we find it absolutely impracticable to carry out that scheme, and unless, therefore, we are able, with the assistance and assent of the bondholders, to devise some more practical method of dealing with the property than exists at present that property will, in all probability, be sacrificed, and we, as bondholders, will get little or nothing for our money. You know I dare say what the history of the old Victorine Mine was. The capital, which in cash, as I understand, amounted to 100,000*l.*, was *bona fide* raised and paid upon the security of the bonds, of which you and I are holders. According to the tenure of that original bond we were mortgagees of the entire property, and of this further prospective advantage that when our bonds came to be paid off we should receive cent. per cent. profit on the investment, and 10 per cent. interest in the meantime. That sounds, of course, an extravagant mode of raising money, but in all such speculations as this there must be a certain advantage offered, or, of course, the money would not be found. The money was found *bona fide* upon these bonds—100,000*l.*, and was sent out, but, as you know, was squandered on the other side that there is absolutely nothing left for us as bondholders, but to secure our own interest. A small further sum of 7900*l.* was raised upon second mortgage in May, 1882, but of course the first charge upon the property are the bonds which are held by ourselves, of 100,000*l.* Well, it is obvious that the bondholders now on the bondholders could hope to obtain is to get possession of the property which constitutes the security for our bonds. If that property is worth anything of course it will realise for our own benefit; if it will realise nothing regarding the prospects of the company itself. In October, 1882, a meeting of bondholders was held and a committee appointed, and upon the report of that committee a scheme was adopted, which was sanctioned by the Court of Chancery, and upon which the new company and the board of directors, of which I am the Chairman, were formed. That scheme was a scheme devised in the interests of the bondholders, and in the hope that the bondholders would be ready and willing to do something to save their own property. Accordingly the scheme proposed to issue fresh bonds to the existing bondholders at a reduced rate of interest, giving them at the same time a certain bonus as a compensation for giving up their contingent interest in their old bonds; but the scheme turned upon the bondholders finding a sum of no less than 30,000*l.* for the purpose of developing the mine, and of enabling them to work the company. We devoted a great deal of time and trouble to the preparation of a circular, which was addressed to every bondholder, stating the exact facts, and asking them to aid in carrying out that work. Gentlemen, not a single response was made; not one farthing has been found or offered by the existing bondholders towards carrying out that scheme; and if it had not been that the directors of the new company felt convinced from the reports which reached them, that the property was far too valuable to allow it to be sacrificed without an effort, the whole thing must, of course, have gone, and you must have either have found money for yourselves, or lost all that you had invested. It is obvious you cannot get the public to come into such a scheme, because the public will not enter into a mining speculation with 100,000*l.* of bonds hung round their neck. The public want to see some prospect for themselves; they do not want to put money into a scheme merely for the benefit of the bondholders, who will not help themselves. Therefore you may take it manifestly that that scheme has failed; we cannot carry it out, nor can we raise a shilling under it, and if it depends upon that then the end of the concern. Now, as regards the property itself. We were exceedingly anxious, some of us; I myself, if not so much as our friend Mr. Jenkinson, and others who had considerable sums invested in these bonds. I made enquiries, and I found undoubtedly that there was a mine of value which was the property of the company if only the means were found for the purpose of working it. But there are these difficulties. First, there were creditors on the other side to the extent of about 10,000*l.*, who were becoming very clamorous, many of them the liquidators of the old company had to consider what they had to do in order to satisfy those clamorous gentlemen. Beyond that a certain number of what are called claims, which constitute the mining property are not patented—there is no absolute or indefeasible title to them. They are in a position which, according to mining law in that part of the United States is called "claims." The title can be established by registration year by year, with a certain certificate that a certain amount of work has been bestowed upon each claim during that 12 months. There are four months ago we became aware that some of the claims, which were believed to be valuable portions of our property were in this position, and unless some money was found for the purpose of doing the work upon those claims they would be forfeited. Well, the bondholders would not find any, and therefore we were compelled to find it ourselves; and upon the request of the directors, and the request of the liquidators, and their giving such security upon the proceeds as they could do, I thought it in the interests of all parties to find 800*l.*, and send it out to America in order to save the property. (Hear, hear.) That was done. Mr. Guinness, a gentleman, whom I must beg your pardon, we met out last November and visited the mine, and did at our own expense a sufficient amount of work to cover the necessary registration; he registered the claims, and they are, at all events for another 12 months, as safe as if they were patented. He also saw the creditors of the company out there with the view of arranging with them if possible some better terms than they were clamouring for in the shape of cash, and he succeeded in inducing the American creditors to take their claims (which of course would be strictly examined as to any legal and proper claims upon the company) half in cash and half in securities of the new company should be able to offer to them. He also in the course of the work done upon the claims unquestionably found a mine of most promising character, and Prof. Price and Mr. Irvine, whom we employed as a practical miner, found there was ore of a very paying quality lying close at hand and ready to be won if the capital were found. (Hear, hear.) So we, at all events, have been perfectly satisfied that if we can raise a sum of (say) from 15,000*l.* to 20,000*l.*, which is less than the 30,000*l.* originally contemplated—we can arrange with the American creditors, and we can obtain absolute and indefeasible possession of the property, and we can develop the mining operations to an extent which we have every confidence will demonstrate that the mine will be a paying and a self-supporting property. (Hear, hear.) That is the exact position of the matter now. If the bondholders will do nothing the position of the matter of course is this. The actual liabilities of the company to the bondholders is 200,000*l.*, because their liability is for the original amount of the bonds, plus the bonus, which was part of the original bargain; but I must tell you at once that any attempt to save your money must be dismissed as absolutely out of the question, and no man in his senses would dream of an attempt of getting more than the substantial value of the money which he put into the concern. We may take it, therefore, if you please, that there exists upon the property the mortgage debt of 100,000*l.*, then there is the 8000*l.*, which makes 108,000*l.*, and there also exist certain open debts, the exact position of which I confess, not being as familiar with the law of the State of Nevada as with the law of the United Kingdom, I cannot exactly describe to you. I do not know what creditors can do there. They threaten very mysterious proceedings. But we seem to owe in that way about 10,000*l.*, there are, of course, open debts of 10,000*l.*, making a total of 118,000*l.* Now, supposing that we, the bondholders, were to do the best we could for ourselves, what could we do? Well, it is obvious that we could not do anything better than seize the property as mortgagees; that is plain. And if we did seize the property all we could get, even if we sold it, would be our principal plus the interest, and we must take it with its liabilities. That is our position. The best we can do for ourselves is to devise a new scheme by which we, the mortgagees of the property in possession, can work it. Then, that leaves, you see, the only remaining question—Can the additional capital required be raised for the purpose of developing the property? Now, it appears to me that that is the only basis upon which this matter can be dealt with at all. (Hear, hear.) We must make up our minds that our bonus is out of the question. I am afraid the shareholders of the original company must make up their minds that there is nothing beyond the mortgage which could be realised. Therefore we cannot consider them. Therefore, speaking generally, the scheme which has suggested itself to us is this:—That the entire property should be conveyed to the new company if the new company can take the conveyance, if not, by such modification of the Articles as may enable it to do so, that the property should be conveyed both by the liquidators of the old company, and also the trustees to the bondholders to the new company, for a price representing the principal amount of the bonds and the open debts of the company. That you see would give the new company the absolute property in the mine. Then it is suggested that the shares of that new company—what I call the property in the mine, should be distributed amongst the bondholders in the exact proportion in which they hold bonds. (Hear, hear.) It would be just, therefore—I see you are following me—it would be just as if (the mortgagees) took possession of the property and became mortgagees in possession, and divided the property amongst themselves, finding a purchaser at the price of the mortgage bonds, plus the debt. Of course, that purchaser cannot pay in cash; therefore, you must take in the property the same interest you have in the bonds. It makes no difference that you will be ordinary shareholders, because there would be no shares in the property, excepting you—you would have the property in the shape of shareholders instead of having it as mortgagees. That is a manageable thing. You are a company then. Then comes the question—How are you to raise the money which is necessary, and what amount of money is necessary to enable the board of directors whom you may elect to carry out the mine,



and make it profitable and pay the debts? Well, it is obvious there are two ways in which it can be done; if you will do it there is no difficulty at all, and if you will not it is no use taking possession. Somebody must find money, and therefore, the only way would be for the new company to empower to such a limited amount as the bondholders might choose to sanction, the bringing in of the public, by offering to the public an indenture to find the money as a mining speculation. A mere mortgage bond upon the property with, say, 8 or 10 per cent. interest, would not induce the public to subscribe. I put it to all of you—you would not find exchequer upon that security. (Hear, hear.) It is, therefore, suggested that the only way to bring in the public is to give to those who will find what money is necessary a sufficient interest in the mine itself to give them a share in the speculative result which may be hoped for from the employment of the capital. Therefore, what is proposed is this—that whilst a new company should be formed the shareholders should consist of the old bondholders, who are to take shares exactly *pari passu* with their interest as bondholders, and that they should authorise the directors to raise a sum not exceeding—I say “not exceeding”—30,000. It is a limited sum, more than is actually required; but, still, it is desirable that we should not have to come back again in the event of success not being achieved with a smaller amount—that we should raise 30,000, upon mortgage bonds, at 8 per cent., giving to each bondholder a share for each 10,000, which he advances by way of bond; so that the new bondholders would become bondholders at 8 per cent., and for extra profit would share with us in the property of the mine if the finding of the money resulted in prosperity; in other words, they would become shareholders *pari passu* with us, and they would have a preferential security to the extent of the money they find by bonds at 8 per cent. Speaking roundly, that is the scheme which the directors propose to submit to the Court of Chancery. We have every reason to believe that this is a good scheme, and that the expenditure of 10,000, upon it, making, with the 20,000, to be paid to the American creditors, 30,000, in all, will develop it into a paying position. If so, then the bondholders would be in a better position than under the bonds, for they would have the whole property instead of having only a contingent interest under the bonds. (Hear, hear.)

A SHAREHOLDER said he was pleased to see Mr. Pope in the chair, and he hoped and believed that something could still be done by energy and perseverance.

The CHAIRMAN said if the capital had been honestly employed which was sent out we should now be in possession of a splendid property. Prof. Price, who is thoroughly to be trusted, based his opinion of the mine on the fact that the ore can be readily treated, and the whole secret of our present position arises from the fact that our money was not honestly employed in the development of the property. What we propose to do is of course to secure the honesty of those whom we employ out there. We hope by the employment of a very much smaller sum than that which was hitherto sent out that the property is all that has been represented to us. The Chairman then read a recent letter from Mr. Guinness, which was of an encouraging character, and in conclusion moved the following resolutions:—“That the bondholders present approve of the scheme suggested by the board—to sell the property to a new company for a sum sufficient in ordinary shares to pay each bondholder the amount due to him *pro rata*, and interest up to March 31, 1884, such new company to undertake to discharge all the other liabilities of the old company, and request the board to obtain the order of the Court to call a meeting to sanction the scheme, and “That the money to be spent in carrying out such new scheme be a first charge upon the proceeds of the sale of the mine should the proposed scheme fail through.”

Mr. JENKINSON seconded the resolutions.

A short discussion ensued, in which general approval was expressed of the course suggested, and two or three shareholders expressed their obligations to Mr. Pope and the directors for the trouble they had taken in the matter.

The resolutions were put and carried with one dissentient.

A vote of thanks to the Chairman and directors closed the proceedings.

#### INDIAN GLENROCK GOLD MINING COMPANY.

An extraordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Thursday, Col. HOWARD in the chair.

Mr. SAMUEL JENNINGS (the secretary) read the notice convening the meeting, which stated that the meeting was called for the purpose of considering the advisability of winding-up the company with the view to its reconstruction.

The CHAIRMAN said:—Gentlemen, it will be in the remembrance of the meeting that at the last time the shareholders met together the directors received from them a mandate to do certain work, and I may state in the first place that they have since that meeting steadily devoted themselves to the special points to which their attention was directed at that meeting. It may perhaps be advisable to refer to the history of the company as it has been since the beginning, in order that the shareholders present may have it briefly in their minds how the present state of affairs comes about. It will be remembered that the Glenrock Gold Mining Company originally bought the mining rights only over a very large extent of country in which, according to the reports of the Government mining agent, Mr. Brough Smyth, and others, there existed most promising reefs of quartz. After a time it was found that the action of the shareholders could be exercised in such a manner as to a very great extent to interfere with the mining operations of the company, and as there appeared to be valuable surface property in the shape of a very extensive forest, besides coffee plantations, the shareholders determined in general meeting to purchase those surface rights, and those surface rights were purchased at a very considerable expense. There is no doubt that had the enterprise been successful the timber so purchased alone would have been a most valuable matter. The timber still remains there, and we hope that yet a great deal may be made of it. The South Indian Gold Mining Company did exactly the same thing. They commenced by buying the mining rights, and found it necessary to purchase the surface rights. The Trevelyan Company held the surface rights of a portion of their property, which was purchased from the South Indian Company, but only the mining rights as to the remaining portion of their estate. It will be remembered that these three companies have been gradually amalgamated, so that the expenses of management of the office and of everything else are now only a third of what they were when the companies were originally started. In the remarks I make to the company as to what has been done, and as to what the prospects at the surface are, I venture to remind the shareholders twice before we have been out there, that I have spent many months there, and on both occasions without costing the company one penny, so that I speak to you as one who does not speak by the reports of agents or mining captains, and so on; but as one who has seen with his own eyes the property and the works which are going on. It would have been much more satisfactory naturally to the directors if we could have met you with successful results of the operations from which so much was expected; but the directors, in view of all that has passed, feel that they have done all that could be done, and that the present state of affairs is in no way attributable to them, or, indeed, to anything except Nature. The reports from Mr. Brough Smyth and the other experts were that gold reefs were cropping out in all directions. Men who for a number of years had been engaged in mining in Australia went and inspected these properties, and taking pieces off the rock they found gold visible in them, and they found that gold was to be got by crushing and washing, and they naturally came to the conclusion that where there were such evidences of ancient workings, such distinct evidences of the present existence of gold, that it only required sufficient energy and capital to develop a very large industry, and to make the South Wynaad equal to Balaarat or any of the great Australian gold fields. Nature has proved too much, whether for engineers, miners, or shareholders. The whole country reeks with gold, so to speak, but it is so disseminated a character that no single company of all those started has yet succeeded in finding a paying shoot of gold. Very large sums of money have been expended and sunk. In our own properties alone the amount of money spent in prospecting has been extremely large. Wherever a lode appeared to show extensive workings have been carried out to prove whether the lode was a true vein, and improving as it went down. Portions of our estate can only be likened to a cheese that has not turned out well, and which you have often seen riddled by the cheese taster, and when cut open there is hardly an inch that the taster has not been through in one direction or another. That is precisely what has happened in many portions of our property; the expense of proving these places 100 or 200 yards in the centre of the earth is a very much more extensive operation, and one that takes very much more time than the simple process of tasting cheese, whether good or bad. The result of all this work is to prove that in a very large portion of the properties, although there exist large masses of quartz containing gold, the gold throughout is scattered so sparsely that it does not pay to work it. The present position of the various properties, I may briefly mention, is that in Glenrock proper it has been thought advisable to suspend all mining work. The Korumia reef of which the shareholders have heard some very favourable reports, and of which our manager had at one time a very good opinion, has disappeared altogether—there are no symptoms of it in the hard rock. The Plantation and the Agnew reefs are huge masses of quartz, but they contain gold in so small a quantity that it is not remunerative to take it out. In the South Indian the whole of the work that was first done has proved precisely similar. There had been something like 8000 or 9000 tons of quartz got out, almost all of which will show gold; but the gold is in such exceedingly small quantities that although quartz has been got out it will not pay to take to the mill and treat. Of course it is most disheartening, but it is what no body of men could help. It is one of the misfortunes of fair mining work. I mention it so fully to show you, gentlemen, that if your money has gone it has gone in a legitimate mining adventure which had every appearance at one time of turning in exactly an opposite direction. In Bittul, from which also the shareholders have had some very favourable reports, the shaft which we were ordered to sink at the last meeting is being rapidly sunk. The reports from that come very differently—sometimes better, sometimes worse. At one time our manager writes in a very desponding way that the quartz has turned out bad, and that the reef is pinching out; then news comes that things are improved, but in spite of all these circumstances we are getting the shaft down to the depth at which they expect to meet the reef—200 ft. If it does strike the reef at that depth they look upon success as hopeful; if they do not strike it at that depth they can only believe that this reef has pinched out and does not go down. In Trevelyan the No. 1, which was another of the points to which the attention of the directors was especially directed by the order of the meeting, has been steadily gone on with, and we are within six weeks of the last meeting, has been steadily gone on with, whose opinion was taken by the Trevelyan Company before the amalgamation on the point, decided was that to which we ought to go before we finally abandoned it, but I regret to say that so far the operations on that reef are not better than before we commenced driving so low. Before the Trevelyan Company was taken by the Glenrock Company they had entered into what appeared to be a very favourable arrangement with the Dingley Dell Company to treat a very large quantity of favourable looking quartz which was ready for crushing; but the Dingley Dell Company had no capital to put up the mill which they already had, and to try the crushing. A quantity of that stone has been crushed. Like all the rest of the stuff, it contains gold; but the quantity of gold-bearing quartz is, I am afraid, even there—although the cost of mining is less than in almost any other part—not sufficient to pay. About 250 tons of mixed crushing gave 5 ozs. & dwts. of gold of pure quality, and 1 ton of pure pyrites gave 1 oz. 15 dwts. of gold. It is not, I am afraid, what it ought to be. We have at various times reported to the shareholders that work was being done on the alluvials to see

whether anything could be done with them, and I will ask the secretary to read some extracts from the manager's last letter on the subject of the alluvials.

The SECRETARY then read the following report:—

Dec. 22.—Glenrock Alluvials: I regret much we have been disappointed in finding the gutter of this deposit; but during my absence in England, the shaft having been sunk into hard rock all round, Captain Morrish thought he was low enough to commence driving to reach the bottom, but he was evidently mistaken. Until this is reached and prospected in one place or another in the Glenrock flat I do not consider that the place has had a fair trial. I would recommend that during the ensuing dry weather we make another trial. Since I last wrote I have had all the jungle cleared round our prospecting shaft down to the river's edge, and I am perfectly amazed at the immense amount of work I found to have been carried on by the old workers. The place was covered by impenetrable jungle, although actually adjoining the coffee cultivation, and from the size of some of the trees in the workings must have been worked many, many years ago. It is simply riddled with sluices, the sides of which are built up in the most approved manner, although some of the boulders built into the walls are large enough to have required almost mechanical power to have moved them. Now, although it is quite possible that all the gold has been removed, it is also possible that the lowest gutter was never reached, or even if it were at this point it might not be lower down the flat, therefore a trial might be made. If we could prove that there is any considerable portion left it would pay to hydraulic.

The CHAIRMAN: So much for the mining prospects. With regard to the surface cultivation, at the time we took over the surface rights the coffee was under lease to certain gentlemen. The Wynaad coffee has for a very large number of years been cruelly neglected, and it has become rather a standing by-word that from want of capital coffee cultivation in the South-East Wynaad has been badly done; and the result is that when the coffee came into our hands at the beginning of the year we had it examined by experts, and a great deal of it has gone so bad that it is considered perfectly useless to waste money in continuing its cultivation. It has, therefore, been considered advisable to abandon certain portions of the coffee plantations, and to devote our attention to better portions of the acreage. The crop of coffee expected this year is about 50 tons valued at 35000, which ought to leave a profit on the expenses of cultivation of about 12000. When I was out there I examined the estate particularly with the view of the cultivation of cinchona, which is being very largely grown in various parts, and, as you know, is expected to be in the future one of the valuable products of Southern India. The best parts of our estates have been planted up at an expense of 11500. The trees take four or five years to grow before they can be touched; but from the time they can first be touched the produce goes on increasing with very little cost for upkeep. Then, then, is the position of the property at the present time. But for some time past, as the circular which was sent to you will have brought to your notice, the directors, dissatisfied with the appearance of the mining prospects, were extremely desirous of making the most they could of the extensive surface run of country of several miles in extent containing ground of all sorts—high ground, low ground, watered ground, and everything else; and the growing requirements of the world in the nature of textile fabrics and of the fibre producing them were brought strongly under their notice, and they have felt that it would be a very valuable thing if they could utilise the important estates we hold in Southern India for the cultivation of these plants. Up to a recent time, however, the expense of working the plants and clearing the fibre from the gum and other materials with which it is associated was so great that only the very best fibre-producing plants paid to treat; but the last 2 months has been solved, and there are at least two machines which either alone or in combination will treat the fibre-producing plants of not so high a quality as the true China grass, and produce valuable fibre for the market. The directors might technically have gone into this business under their old constitution, but they were advised by counsel that according to the constitution of the old Glenrock Company they could only carry on surface work, and grow this fibre, and enter into contracts for working it, and, on so long as they were carrying on *bona fide* mining work, but the machines growing in the hands of the directors, and had to be sold, and the opportunity was offered to the company of obtaining on exceedingly favourable terms the exclusive right of some of these patents, and also the use of others, and they felt that it was of such importance to the company that these things should be obtained, and that the fibre should be grown, that they determined to suggest to the company the course which has been shadowed forth by the notice that has been sent to you. The change is merely nominal. You have a certain amount of capital left in the hands of the shareholders to sink to a certain depth. You have certain expenses going on there, and with a very slight increase in the expenses this surface cultivation can be carried on, because it can be carried on by native labour and under native supervision, which is not the case with a great deal of mining work, involving, as that does, the presence of highly paid foremen, mining engineers, and so on. The directors felt it was a very good opportunity for the company, for that while completing their existing work, the property in the mining district, they should sink the lead in these fibre-producing and cleaning process, and thus to earn a dividend on the capital which remains in hand. The properties in the Wynaad would be almost without purchasers at the present moment if the estates came to be offered for sale, because capital is what is wanted in Southern India more than anything else; but you have properties suitable in every respect for growing the rehea. You have water-power and machinery, which only requires very moderate prices added to enable them to treat not only the rehea grass, but also the various samples of rehea grass which you have in the machines which we have now secured a provisional right to use, it would have been worth from 230 to 250 a ton. Then we have the white variety of the rehea, already alluded to, worth from 400 to 450 per ton, while a very large portion of our ground is well suited to the growth of true rehea, or China grass, besides Manila hemp and other things, which, with the improved machinery and cheap labour at our disposal, will doubtless come in for producing very valuable fibres. The secretary will read you our manager's report on these various articles.

The SECRETARY read the following extracts from the manager's letter:—

Nov. 19.—Wild Plantain: We have very large quantities of this plant available at once, and had we any machine we could send home large quantities of fibre directly. I have heard of a fibre worth 500 per ton, the plant from which it is obtained growing wild all over our hills. I am going to prepare a small quantity (say) 1/2 ton, and send it home for you to place on the market. The fibre can be got from 6 ft. to 8 ft. long and silky white.

Dec. 17.—Rehea: 1500 plants were put down last week. These are the first planted in the district.

Dec. 24.—I examined our nursery the other day, and am glad to say we have not a failure; the plants up to now seem to be doing very well. A small piece of land close to the nursery will be cleared, and next monsoon cuttings will be taken and planted out.

The CHAIRMAN, continuing his remarks, said it was estimated that with a produce of 10 cwt. to 1 acre (very good authority) placing the produce at 2 tons to 3 acres they would have a profit of 150 a ton at the least. They proposed to have 300 acres planted up with true rehea, which should alone yield a dividend of 90 a share on the reduced capital of 200,000. The processes which the company had provisionally acquired, subject to the approval of the shareholders, were—Messrs. Death and Ellwood's machine (Smith's patent) for the deoction of every description of fibre-producing plant by the action of water; Messrs. Egan's patent for the preparation of ultimate fibre from raw fibres by boiling under steam pressure in water containing sulphuric acid; and the process with magnesia, also for the conversion of all refuse into pulp for paper-making; the exclusive right to use these machines and process having been secured within the limits of the South-East Wynaad; M. Favie's process for the deoction of rehea by subjecting the green stems to the action of steam; and M. Frémy and Urbain's process for the treatment of textile vegetable fibres by subjecting them to the action of caustic alkali and pressure in certain exact proportions according to requirements the rights to use the two latter processes having been secured for the whole of India and for the province of Mysore. The Chairman having mentioned that the fibre which would be produced would be available for a great variety of purposes—from cordage to silk dresses—stated that the expenses of reconstruction would be very small, and concluded by moving the following resolutions:—

(1.)—That this company be wound-up voluntarily, and that John Turner Hopwood, a director, and Samuel Jennings, the secretary to the company, be and they are hereby appointed liquidators for the purposes of such winding-up. (2.)—That the directors be and they are hereby authorised to do and transfer the property, business, and assets of this company to a company intended to be registered with Limited Liability under the title of “The Glenrock Company (Limited),” in consideration of the latter company agreeing to discharge the debts and liabilities of this company, and the costs of and incidental to the sale, and in consideration of 132,428 fully paid-up shares of 10s. each in the Glenrock Company for distribution amongst the shareholders in this company. (3.)—That the liquidators be and they are hereby authorised to enter into and execute such contracts and other documents as they may think fit to carry out the purposes aforesaid.

Mr. HOPWOOD seconded the resolutions.

Mr. BLUMENFELD: How much capital is left intact after paying the expenses?

The CHAIRMAN: Rather over 30,000.

A SHAREHOLDER: What extent of land have we?

Mr. BLAND: What is the amount to be paid for these patents? I think the

Chairman should give us the exact terms.

The CHAIRMAN said the matter was, but I did not like to detain the meeting. For the Favie Frémy processes the price paid is 6000 fully-paid shares of this company. We have those in hand, and it costs the shareholders nothing. In the amalgamation there were certain shares which belonged to us which we can avail ourselves of to pay that without any call upon the shareholders at all. For the Death and Ellwood machines we have the exclusive right, in South-East Wynaad, and what we have to pay is an engagement to take ten machines at a cost of 1000 each yearly for five years, and then we have the right for the period of the patent, irrespective of further purchases. If at the end of the first year we are dissatisfied we can give the matter up; but during that year every company desirous of using it must come to us. The machines are extremely handy, and can be easily moved. For Egan's process we have the exclusive right in the South-East Wynaad by paying a royalty not exceeding 5 per cent. of the value of the material produced, and we have to pay 5000 to stop the formation of a separate company, and to reimburse the expenditure already made. That is the only cash payment at all. The acreage we have is about 5000 acres, 2000 of which are in forest. We propose to devote about 300 acres at first to the cultivation of rehea grass. We have about 800 or 900 acres suitable for the cultivation of true rehea.

The CHAIRMAN, in reply to a SHAREHOLDER, said the coffee now coming for

ward was worth about 700 a ton.

Mr. JOSEPH recommended that the board should turn their attention to coffee, for, speaking as an old planter, he could tell them that that was a profitable crop to cultivate.

Mr. BURTON objected to the reconstruction of the company, and moved an

amendment to the effect that a committee of shareholders should be appointed for the purpose of investigating all matters connected with the formation and

subsequent operations of the company prior to any reconstruction proposed by the board.

Mr. HENDERSON seconded the amendment, and asked if counsel's opinion had been taken as to whether a case could not be sustained against the vendors. In fact, had the vendors been appealed to as men of honour to refund some of the money which they had received from the companies for their properties.

The CHAIRMAN, in reply, said that an appeal had been made to the vendors but without effect; indeed, they had received an absolute refusal to entertain such an idea for a moment. The question had been considered more than once as to whether an action should be taken against the vendors for misstatements; but the opinion was that no such action could lie against vendors, as the information given by the vendors was mainly founded on information derived from Government.

Mr. W. ABBOTT, in the course of some further conversation, patented the reconstruction of the company, and said he was pleased that the patentees of the process for dealing with the rehea grass were contented with so small a remuneration, and with a remuneration so largely contingent upon success. He was also of opinion that no action could lie against the vendors. In fact, some friends of his (leading shareholders in the company) had taken counsel's opinion, independent of the directors, on the point, and that was the result of the enquiry. He was by no means so absolutely dependent on the results of Indian gold mining as such as some persons seemed to be. The latest report from the Indian Consolidated, though not jubilant, was encouraging. If shareholders expected to obtain paying quartz at a depth of 50 ft., of course they were greatly mistaken.

At the close of a long and desultory discussion, the amendment was put and lost, only seven of the shareholders in a full meeting voting for it. The original resolutions were thereupon submitted *en bloc* and adopted.

Mr. HENDERSON desired that his protest should be recorded against the passing of the resolutions.

The Chairman having been thanked for presiding, the meeting was brought to a close.

#### NEW VAN CONSOLS AND GLYN MINING COMPANY.

The third ordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, yesterday, Mr. PRYCE JONES (the Chairman of the company) presiding.

Mr. JAMES COOPER (the secretary) read the notice convening the meeting. The minutes of the preceding meeting were read and confirmed. The secretary also read the report of the directors, and then said he wished to tell the shareholders what the unsatisfied debts of the old company were. In the first place the directors' fees outstanding amounted to 2310. 6s.; secondly, the merchants' bills to be paid by the old company, 51. 3s. 6d.; then royalties due, but since paid; secretary's salary, 930. 15s.; outstanding coupons for debentures, 24. 7s. 11d.; solicitor's charges, 124. 12s. 10d.; the claim of the North and South Wales Bank, 542. 10s. 7d., against which the bank held the security of the uncollected calls. The uncollected calls, of which 5034. had come in since the balance-sheet was issued, now amount to 12730. The debts at the present time were to merchants, 2710; the debenture interest and the amount advanced to pay the labour cost, all of which was set out in the balance-sheet.

The CHAIRMAN said Mr. Cooper had cleared the way for him to a very great extent. He was very glad to see so many shareholders present; though the proportion to the actual number of shareholders was still small; but he hoped they would come to something definite and practical. To prevent unnecessary discussion he would as briefly as he could explain the present unfortunate position of the company. The present position had not been brought about by any fault on the part of the directors, but those connected with the company. Circular after circular had been sent to the shareholders asking them to respond to suggestions which they themselves had made as to the carrying on of operations. Unfortunately the position of the company was an unfavourable one; but they were not in so abject a condition as might be supposed. Indeed, they would have been perfectly solvent if the shareholders would only have responded to the calls which had been legally and honourably made. The calls outstanding amounted to 12730. 15s. 6d. If these calls had been paid the directors would have been in a position to have paid the royalties, labour costs, and merchants' bills, but he regretted to tell them that the funds in hand did not enable them to pay the November and December costs, and seeing the state of the finances of the company it had been determined merely to keep the mine open. The amount at their bankers was only 210. 5s. 1d., which of course would not pay the wages nor the rent. The directors had met over and over again at a great sacrifice of time and money, for during the last two years they had received nothing even for railway or other expenses. They had done everything that could be done, and they were now in a position to pay their way, and they had besides given security for tradesmen's bills and bankers' overdrafts. They had, in fact, used every strategy possible to hypothecate the little securities they had in order that the company should not have its actual position exposed; but the climax had come. At the present time lead was only at about half the price of what it had been in the last 30 years; but if it had been at 12s., 13s., or 14s. a ton, he told them that notwithstanding all the difficulties they had had to contend with, they would have been able to pay a dividend of 4s. or 5 per cent., and consols, this would not have been so bad a result. At all events, if they had had such he would not have seen the placard which he held in his hand (an auctioneer's bill) advertising the sale of the property. In these circumstances the directors met together. They had a cost-sheet of 2000. to meet and a claim of 3330. for royalties, and for this latter amount their landlady had distrained. Considering that the shareholders in this and the previous companies had spent thousands of pounds on the property, and that the directors, in return, he considered the conduct which they had received most cruel and exacting, and it really seemed as if their landlady, or somebody connected with her, wished to get the property from the company. Until last Lady Day their landlady would have accepted 2000. for the royalties due; but the workmen had not then been paid, and the directors considered the men had the first claim. (Hear, hear.) The distraint had been put in for the full amount of 3330., and in spite of long interviews between Mr. Rock and himself and their landlady's solicitor, they had been unable to obtain anything but a promise that the landlady would let things take their course. He (the Chairman) attended the sale held some days ago. There was some little opposition, and a gentleman was declared the purchaser at 9500., but it had already been arranged with the auctioneer that the purchaser should pay in cash, and as the gentleman referred to tendered a cheque, he (the Chairman) objected, and the result was that the property was put up again and knocked down to him for 4200., the total cost of the purchase being about 4500., and of this amount proportionate sums had been subscribed by Mr. Rock and Mr. Cooper. (Applause.) They, however, did not wish to take the slightest advantage of the shareholders, and they would hand it over on the repayment of the sum advanced. (Applause.) What was proposed was that a new company should be formed with a capital of about 12,000., out of which this and the other recent advances should be paid, and the debenture-holders would take cash or shares for their debentures. He did not respond even yet. He had sunk 90000. in the property, and he was still prepared to increase his holding if the shareholders would take their *pro rata* allotment of the new shares. Capt. Douglas, writing the first saw, their *pro rata* Vercoe, who was present, was also hopeful of the future results. It might be mentioned that in the case of their neighbour, the Van Alue, which had gone through great vicissitudes, Capt. Williams was told by the proprietor in giving him a cheque for 1500. for the costs that that was the last he would have; but before that amount had been spent a discovery was made which had yielded 1,250,000. sterling.

Capt. VINCOS referred hopefully to the future of the mine, especially in the western portion, and said that the lead produced 1/2 ton of lead, and he did not hesitate to say that the appearance of the mine was better than it had been since his connection with it. Though lead was very low, they could work at a very small loss, which would be turned into a profit if the productiveness of the lode increased or the price of lead improved. He strongly advised the spending of a little more capital in the development of the mine.

Mr. JOSEPH ROCK (a director), in reply to Mr. Sturge, said the 5 per cent. assessment on the debentures did not produce a sufficient amount of money to pay off the whole of “the point of flesh” demanded for royalties, besides the labour costs, and therefore, the amounts subscribed would be returned. As a *dernier resort*, the Chairman, Mr. Cooper, and himself provided the bank notes to buy the property in. (Hear, hear.)

On the motion of the CHAIRMAN, seconded by Mr. ROCK, the report and accounts were adopted.

It was stated in reply to a shareholder that nine months ago the royalties of 3000. then due were paid.

The balance to the debit of the revenue accounts was transferred to the cost of the mine.

Mr. STURGE proposed the re-election of the Chairman as a director.—Mr. H. S. PORTER seconded the proposition, which was carried.

Mr. J. C. BOLTON was reappointed auditor.

Mr. ROCK said the meeting would have to arrive at some conclusion as to the best mode of dealing with the position of the company. The debenture-holders, though they prefer to be paid off, would take the amount of their debentures in shares in a new company if the shareholders would find a sufficient amount to bring the capital up to 12,000. Out of that amount the Chairman and himself would require to be repaid the amount which they had lately advanced to save the company, and there would then remain 4000. to 5000. to carry on the mining operations. If at the end of the spending of that amount something good was not returned, he at all events, would give the affair up as a bad job. There were evidences that the property contained rich lead ore; but money must be found, and at once, to prove whether the deposits were valuable. If the mine was not worth fortifying, of course the property would be sacrificed at the price of old iron. He recommended that if the new company were formed the old lease should be given up and a new one taken. The royalty which they were at present paying of 10s. per ton was out of the question. (Applause.)

Capt. VINCOS, in reply to a question, said that 50000. of working capital would enable them to go on for a couple of years in a proper manner, and in that time the property could be thoroughly proved. If it did not give a good return then he would advise them not to put any more money into it.

Mr. ROCK added that, in the event of the new company being formed, he would strongly advise that, for some time at all events, the lead should be stocked. It was only by lessening the supply that they could hope to realise a fair price for their produce. (Hear, hear.)

Mr. J. C. BOLTON advocated the issuing of deferred shares to the present shareholders, and suggested that the new capital should be 25,000. or 30,000., of which 12,000. or 14,000. should be subscribed in cash, and in exchange for the debentures, and that the remainder should be in deferred shares in the proportion of (say) one share for every five shares now held.

This suggestion having met with general acceptance,

Mr. BOLTON moved—“That a committee of three shareholders be appointed to consider a scheme for forming a new company, and conferring with the debenture-holders thereon.”

Mr. T. W. MARTIN seconded the proposition, which was carried, and the following gentlemen were appointed to form the committee:—Messrs. Charles Clark, Sturge, Story, Morris, and Collins, three to form a quorum.

The meeting having agreed to adjourn, the rise was for the preparation of a report by the committee, a cordial vote of thanks was passed, and the shareholders then separated.



# CATHEDRAL CONSOLS MINING COMPANY.

## IN 6000 SHARES.

This Mine is situated in the centre of the richest mineral deposits of the known world. On the East, West, North, and South millions sterling have been dug from the various veins or lodes.

The Champion lode of the district passes through the ground, and is from 10 to 11 ft. wide. To cut this rich copper lode at the 80 or below has been the aim of the present shareholders from the starting of the Mine. This will now soon be seen in the cross-cut at the 84 ft. level, and make the Shares well worthy of buying for a great advance.

The Shares are well held by holders, who have gone in for legitimate mining. A plan of the Mine may be had on application to the Secretary,

EDWARD ASHMEAD, Esq.,  
2, DRAPERS' GARDENS, LONDON, E.C.

## Registration of New Companies.

The following joint-stock companies have been duly registered:—

**WASTE METAL UTILISATION SYNDICATE (Limited).**—Capital 10,000*l.*, in 500 shares of 20*l.* each. This company has been formed for the purpose of carrying on the business of manufacturing chemists and metallurgists. The subscribers names are Lieut.-Col. John M. Carter, of Whitehall-yard, 2; Edward L. Cleaver, Town Hall, Kensington, 10; Wm. Lichfield, New Broad-street, 1; Wm. Humphrey Waddington, Addington-square, Camberwell, 1; H. Mason, Camden-grove, Peckham, 1; W. Chad, 18, Billiter-street, 1; Frank N. Thorpe, Nelson House, Stoke Newington-road.

**THE CONNAUGHT COPPER MINING COMPANY (Limited).**—Capital 3200*l.*, in 640 shares of 5*l.* each, of which 512 shall be A shares, and remaining 128 shares shall be B shares, formed to purchase mines and lands of Shroglahy, county Mayo. The subscribers (who take one share each) are—W. Davey, Lime Grove, Seaford; H. McLean, Old Hall-street, Liverpool; R. Lingham, Irwell Chambers, Liverpool; G. Williams, City Buildings, Old Hall-street; J. Skerrow, Irwell Chambers West; J. R. Burrows, Beaumont-street, Liverpool; M. Boundy, Shroglahy, Ballycastle, county Mayo.

**THE ISLE OF WIGHT SANATORIUM (Limited).**—Capital 20,000*l.*, in 4000 shares of 5*l.* each, formed to acquire the lands and mansion known as Southlands, Blackgang Chine, Isle of Wight, and to carry on the business of a hydropathic establishment. The subscribers are—W. H. Traher, Park-street, Grosvenor-square, 5; A. S. Ough, Patern-road, Clapham, 1; G. Marke, Baryworth-road, Loughborough, 1; D. F. J. Henney, Colburn-road, South Kensington, 5; L. Stanistos, Upper Thames-street, 1; E. Horborow, Cophall-court, 1; A. Mitchell, Ferndale-road, Clapham.

**BRITISH SPIRAL TELEPHONE WIRE SYNDICATE (Limited).**—Capital 50,000*l.*, in 10,000 shares of 5*l.* each. Formed to purchase the patents and other rights of Mr. Gorham Gray. The subscribers (who take one share each) are—C. Berry, Bentham-road, South Hackney; J. J. Fleming, Elderfield-road, Clapton; D. W. Money, Brixton-road; W. H. Maitland, Thurlow-square; W. Downie, Lorne-road, Upper Tooting Park; W. O. Duce, Leamington House, Wandsworth Common; P. O. Halloran, Avonmore Lodge, Kew.

**THE NEW HOLLINGBOURNE PAPER MILLS COMPANY (Limited).**—Capital 50,000*l.*, in 5000 shares of 10*l.* each. Formed to purchase the Hollingbourne Paper Mills, and to carry on the paper manufacture. Subscribers are—W. D. Edwards, Upper Thames-street; H. B. Bernard, Bedford-place, Russell-square; E. Harris, Clegate, Escher; W. Tipping, Sevenoaks, 10 shares each; G. Roff, Bedford; R. Kidney, Mayfield-road, Wimbledon; W. H. Pearce, Brown's-road, Surbiton, one share each.

**FLEUSS LIFE-SAVING APPARATUS AND SALVAGE COMPANY (Limited).**—Capital 100,000*l.*, in 20,000 shares of 5*l.* each. To provide divers, firemen, colliers, and others with pure respirable air; also to buy and deal with inventions and letters patent in respect of life-saving apparatus. Subscribers are—C. F. Emmott, Jernyn-street; F. Bocquet, Martin's-lane; G. O. Saunders, Long-acre; A. Thomson, Adelphi-terrace; W. S. Cross, Charing Cross; H. M. Thompson, Regent-street; F. Taylor, Cedars, Brentford, one share each.

**THE STEAMSHIP WILLINGALE.**—Capital 27,000*l.*, 12*l.*, in 256 shares, of 105*l.* 9*l.* 6*d.* each. Formed to purchase the Willingale, and to convey, carry goods, &c. The subscribers are—A. Hunt, St. Helens, 40; H. C. Pelly, Loughton, 2; M. Tract, Chigwell; J. W. Lewes, Great St. Helens; F. Schneider, Elsiey-road, Lavender Hill; W. C. Boniface, Great St. Helens; H. R. Barritt, Great St. Helens, one share each.

**JOHN CHADWICK AND COMPANY (Limited).**—Capital 150,000*l.*, in 30,000 shares of 5*l.* each. Formed to purchase the goodwill, together with the mills known as Tame Side Mills, in Dukinfield, county Chester, Park Hall Mills, Ashton-under-Lyme, county Lancaster, and land around the mills. The subscribers are—W. Chadwick, Woodside, Reddish; J. E. Chadwick, Woodside, Reddish; R. Hobson, Bromborough, Cheshire; J. D. Tunor, Hollins, Dukinfield; H. Cleg, Llanfair; J. Jones P. Rodd, Dukinfield; O. Roberts, Westbourne-terrace, Hyde Park, one share each.

**DOLLOND ELECTRIC SHIPS' LOG COMPANY (Limited).**—Capital 15,000*l.*, in 3000 shares of 5*l.* each. To purchase any invention, &c., in connection with ships' logs. Subscribers are—M. Barryard, Enfield; A. Oscar, Union-road; N. J. Judd, St. Andrew's Hill; G. Farrer, Deal; A. Clarkson, Langara-road, Wandsworth; H. Fulton, Salisbury; T. Cannon, 49, Queen-street, E.C.

**HALL AND PARTNERS (Limited).**—Capital 250,000*l.*, in 25 shares of 1000*l.* each, and 2250 shares of 100*l.* each. To purchase goodwill, and to carry on in Great Britain and the colonies the construction and equipment of railways, tramways, docks, &c. The subscribers are—W. Hall, Penhore, Sussex; F. W. Cuckack, Powis-square, Brighton; W. H. Hall, Claremont-square, N.; A. M. Rose, Queens-road, Brighton; F. S. Hall, Derby-road, Croydon; J. H. S. Hall, Claremont-square, N.; A. Blair, Ship-street, Brighton, who take one 100*l.* share each.

**CHESHIRE COPPER MINE COMPANY (Limited).**—Capital 20,000*l.*, in shares of 1*l.* each. Formed to purchase and work copper mines in the county of Cheshire. The subscribers (who take one share each) are—J. M. Oliver, Batavia Buildings, Hackin's Hey, Liverpool; G. H. Sharpe, Hackin's Hey; H. Tarpley, Divining-road, Liverpool; A. V. Spier, Harsesh, North Wales; A. Love, Egremont, Cheshire; W. C. Wilkinson, Irwell Chambers, Liverpool; W. A. Browne, Chapel Walk, Liverpool.

**MINERAL COLOUR MANUFACTURE COMPANY (Limited).**—Capital 50,000*l.*, in shares of 1*l.* each. Formed to carry on the manufacture of all kinds of colours. The subscribers are—W. Douglass, Sterte House, Poole; C. R. Boul, Dale-street, Liverpool; J. Stanley, Martin's-lane; Sir J. Humphreys, Stratford-place, W.; A. J. Boul, High Holborn; Edward O'Dwyer, Belsize-square, W.; Charles Cummine, Grafton-street, Dublin.

**R. S. TRAILL AND COMPANY (Limited).**—Capital 25,000*l.*, in 500 shares of 5*l.* each. To purchase the goodwill and carry on the business of R. S. Traill and Co. The subscribers (who take one share each) are—W. A. Pattison, High-street, Borough; J. Manland, York-street, Walworth; R. L. Wilton, Walworth-road; H. S. Uphir, Walworth-road; R. S. Traill, Walworth-road; C. Munell, Tanner-street, Bermondsey; W. Painter, Walworth-road.

**EAST WHEAL ROSE, OLD SHEPHERDS, and TRESAVEAN MINES.** Holders of Shares should read Reports, published in pamphlet form, price 2*s.* 6*d.*, by  
CHARLES BAWDEN M.E.

St. Day, Scorrer, Cornwall.

## BRITISH MINES.

## Mining Correspondence.

**ANDERTON.**—W. J. Bowhay, Jan. 24: We have had a grand, and I believe permanent discovery in the 20. We are driving west in the 20 to get under the line lode in the wine west of cross-course in the adit, and have got, I think, within about 8 fms. of the cross-course, where we laid open a splendid adit and down lode of rich tin in our end. It is of the same healthy congenial character as the lode in the west, and yielding on assay 1 cwt. 2 qrs. 19 lbs., and variously to 3 cwt. to 1 ton of stuff, and has greatly improved day by day going west. We are carrying 5 ft. of this lode in the end, and in order to prove its width to the south we have cut into it 2 ft. without reaching the south wall. This is not a mere patch or leader of tin on the south of our drive. It is a well-defined up and down rich lode, which will yield immediate large returns of tin, and so far as I can judge is whole throughout the mine, as I can find no evidence of it having ever been seen before. We were not working for this, and it is a distinct and valuable addition to the points we have had in view. I am delighted with it. All the other points in the mine and the work on surface are going on well.

**BEDFORD UNITED.**—Henry Trezise, Jan. 22: I beg to hand you my setting report for the night ending March 13; North Level: Cross-cut to drive north at the 115, by four men, at 10*l.* per fathom. The 103 fm. level west to drive by two men, at 8*l.* 10*s.*; lode worth 8*l.* per fathom. Four tribute pitches set on the north lode, at an average tribute of 12*l.* in 1*l.*—Bridge Lode. The 62 fm. level west to drive by six men, at 3*l.* per fathom; lode worth 10*l.* per fm. Stope behind the end, by two men, at 1*l.* per fathom; lode worth 6*l.* The 62 east to drive by six men, at 6*l.* 10*s.*; lode unproductive. Stope one by two men, at 1*l.* 5*s.*; lode worth 6*l.* per fathom. The 42 east to drive by four men, at 7*l.* 10*s.* per fathom; lode producing saving work for ore and mundic. No. 1 stope in the back by four men, at 1*l.* 15*s.* per fathom; lode worth 20*l.* No. 2 stope in the back, by two men, at 2*l.* 15*s.*; lode worth 8*l.* per fathom. I have resumed the driving of the 30 west, believing there are shallow bunches of ore in that direction. The end is set to drive by two men, at 3*l.* per fathom; lode 2*l.* 2*s.* wide, and promising. I have set eight pitches on this lode at an average tribute of 11*l.* in 1*l.* The work of the mine is progressing satisfactorily.

**BUE HILLS.**—S. Bennett, R. Harris, Jan. 23: The various pitches throughout the mine continue much the same for some weeks past. The 70 east end is worth 8*l.* per fathom, and the west end 7*l.* per fathom.

**BWLOH UNITED.**—W. Northey, Jan. 23: The lode in the 100, west of Ritchie's engine-shaft, is about 2½ ft. in width, carrying strong patches of lead ore and blende, and has every appearance for an early improvement as we advance towards the junction. The machinery throughout the mine is in good order.

**CARN CAMBORNE.**—W. O. Vivian, Jan. 24: In the 105 the lode is composed of fluor spar, chlorite, and copper ore, it is 2 ft. wide, and its appearance such as I consider very favourable for being productive of either copper or tin in large quantities. In the same level west the lode is of a similar character and composition as when reported on last week, but is increasing in size. In the wine under the 95 fm. level, which is a little ahead of the 105 west, the lode is improving with depth, and producing some rich tinstone, together with copper ore. In the 40 fm. level, west on the north lode, we frequent changes in appearance and composition; to-day it looks much better than it did a week ago.

**CATHEDRAL CONSOLS.**—S. Davey, S. Davey, Jan. 24: The lode in the engine-shaft sinking below the 74 fm. level, is 3 ft. wide, and producing a little black and grey copper ore. The lode in the 74 fm. level east is 3 ft. wide, composed of gossan, and producing a little tin, with occasional stones of grey copper ore. The lode in the rise is 3 ft. wide, composed of quartz and gossan, and producing stones of copper. The lode in the 50, driving east, is 3 ft. wide, composed of pryan and decomposed quartz, producing a small percentage of tin; we have broken from this end some good stones of copper, and we consider the indications are good for an early improvement, the ground being easy for development. We have communicated the wine in the bottom of the 50 to the 60, which has given good ventilation, and will facilitate the driving.

**CWM DWYFOR AND BRYNARIAN.**—John Davies, Jan. 22: Brynarian Mine: We have cut very good lead in the level driving east from boundary cross-cut this morning; there is a good sight in the end now.

—Jan. 24: We have not done much in the way of driving since I wrote you on Tuesday last, as we have been drawing the stuff; we shall now for a few days drive by the side of the lode. I hope to be able to send you a good report next week.

**DERESBY MOUNTAIN.**—J. Roberts, W. Sandoe, Jan. 23: The lode in the shaft from surface is not quite so good for blende as it has been, but we do not think that this is of much importance, as there is a good lode for blende in the roof at No. 4 showing that the little falling-off is only temporary. There are tremendous floods of rain, which will necessarily retard our progress here for a day or two. The No. 4 will produce from 1 to 1½ ton to the fathom. The lead seems at present to be going more south than in any other direction, which if it be so, is rather important. The No. 4 has a large vein of blende showing a little more lead, and the ground is a little easier than it has been.

**DEVON FRIENDSHIP.**—F. R. W. Daw, W. Gill, Jan. 24: The calciner and the rest of the machinery on the mine is working well. We are sending off 60 tons of arsenic to-day, and shall commence barrelling again as soon as the casks are returned. A full report shall be sent you next week.

**DEVON GREAT CONSOLS.**—Isaac Richards, Jan. 24: Wheel Josiah: During the past month the count-house shaft has been sunk 1 fm. 5 ft., making the total depth 9 fms. 5 ft. In the 140, the lode having fallen in the 140, the lode has been sunk 1 fm. 3 ft. 6 in.; the lode 4 ft. wide, being composed of capel and quartz, with peach and a little copper ore, and 2 tons of mundic per fathom.—Railway Shaft: At the 205 ground for cistern-plate has been cut; the necessary work in connection with fixing permanent drawing-lift at this level has been done, and the shaft is again in regular course of sinking. The depth of 3 fms. 3 ft. is now reached below this level, and we hope to continue the sinking at this most important point of operation without any further hindrance. The 205 west, on the south part of the lode has been driven 1 fm. 4 ft. 4 in.; the lode, part carried 2 ft. wide, being composed of capel and quartz, with small quantities of copper and mundic ore. The 150 west, on the south part of the lode, has been driven 5 fms. 3 ft. 6 in.; the lode proving 3 ft. wide, composed of capel and quartz, with some good quality copper and mundic ores.—Watson's: The engine-shaft has been sunk 1 fm., making the total depth 11 fms. 0 ft. 6 in. below the 100, the lode proving 4 ft. wide, of an exceedingly promising character, and yielding 3 tons of copper and mundic ore per fm. The 100 west of the engine-shaft has been driven 1 fm. 5 ft. 6 in.; the lode proving 2 ft. wide, composed of capel and quartz, with peach, fluor, and small quantities of copper and mundic ore. Arscott's rise in the back of the 20, east of the western shaft, has been risen 2 fms. 0 ft. 6 in., and communicated with the midway shaft sunk in the bottom of the adit, which shaft has been sunk 3 ft., the lode proving at the point of communication, and for the greater part of the distance opened on—4 ft. wide—worth 1 ton of copper ore and from 2 to 4 tons of mundic per fm. The 32 east of the western shaft has been driven 1 fm. 2 ft., the lode proving 2 ft. wide, composed of capel and quartz, with small quantities of copper and mundic ore. The 30 west of the western shaft has been driven 1 fm., the lode proving 3 ft. wide, composed principally of capel and quartz.

**DEVON GREAT CONSOLS.**—Isaac Richards, Jan. 24: In the 120, east of Willesford's shaft, the lode is 3½ ft. wide, composed of strong capel and quartz, with peach, mundic, and a little good quality copper ore. In Pengelly's rise, in the back of the 120, west of Watson's shaft, the lode is 3 ft. wide, composed of capel and quartz, and yielding 2 tons of copper and mundic ore per fm. In the 104, west of Willesford's shaft, the lode is 4 ft. wide, and continues to yield 4 tons of copper ore per fm., and its general character is of a most promising nature. In the 60, west of Watson's shaft, west of the cross-cut south, on the middle lode, the lode is 2½ ft. wide, composed of a very strong capel, quartz, peach, mundic, and a little good quality copper ore.

**DRAKEWALLS.**—Moses Hawden, Jan. 24: We have completed the side level, and laid launders between the engine-shaft and Mathew's shaft, and since to-day again discharge the water from the mine. We have during the past week had a considerable settling down of the stuff in the great Gunnis, but no damage has been done to our workings, and we are glad to see this settlement has taken place, as our miners will now work with a much greater feeling of security. The men who have been driving the side level we have now put to drive the 40 west, on the north branches, and to sink a wine below the deep adit west of engine-shaft, on the south branches, and by which we expect to open up some good sections of stopping ground. The lode in the shallow adit, west of engine-shaft, is still producing fair stamping work, but we have opened up a large piece of ground, and shall put more men to stope as soon as we can get ventilation from the great Gunnis, west of engine-shaft. The north branches in the rise in the back of the 40, directly below the shallow adit, are still holding good and keeping in firm ground; this will be in a few months of great importance to us. There is no alteration in any of the pitches since last report. We shall sell about 10 tons of black tin early next week, the produce of the last four weeks from above the deep adit.

**EAST BLUE HILLS.**—S. Bennett, W. K. Mitchell, Jan. 23: There is no change of importance in the value of either of the stopes during the past week, consequently the price remains at 6*l.* 6*s.* 7*d.*, and 6*l.* 8*s.* per fathom respectively. In reference to a search for the Wheel Kitty lode, the better way will be at first to ascertain how far the Gumpas adit cross-cut is extended towards that lode, and this can only be done by means of air-pipes for ventilation, which will be proceeded with at once.

**EAST WHEAL LOVELL.**—R. Quantrell and Son, Jan. 23: The south lode, on which we are sinking, is now 2 ft. wide, and producing good quality tinstuff. A very favourable change is taking place in the lode and ground, and as far as we have opened on it this is the most promising lode we have yet had in this part of the mine. The 12 driving west, on the north lode, contains a little tin. There is no change at Severgon since last report.

**FRONGOCH.**—J. Kitto and Son, Jan. 19: At the 56, east of Llywnoch shaft, we have a set of men cutting out the full breadth of the productive part of the lode preparatory to stopping, and in so doing we find that both as regards its value and extent, it is opening out very satisfactory. It is now laid open for about 10 fms. long and 2 fms. wide, and will yield from 3 to 4 tons of blende and 12 cwt. of lead ore per cubic fathom. In carrying on this work a noteworthy feature has just presented itself, the ore-bearing part of the lode in a westerly direction being divided by an oblique bar of comparatively barren ground, and the richest part of the lode which was formerly on the south side is evidently now carried into the north, where there is every prospect of its continuance in whole ground. This is, therefore, an interesting point, and judging from present indications, there is every probability of our finding a considerable extension of profitable oreground on the north side of the lode, similar to that found on the south side, to which we have just referred. We are pleased to state that the other points spoken of in our last report fully maintain their value and yield

of ores; and on the whole the mine is looking quite as well as for a long time past. We have delivered the 300 tons of lead and blende ore sold last month, and have to-day sampled 300 tons of blende for sale on the 30th inst.

**GAWTON.**—G. Rowe, Jan. 19: The lode in the 132 fm. level, both east and west of cross-cut, is without change during the past week. In the 117 east and west of cross-cut, which has effected the value of the lode; but it continues to look exceedingly kindly, and from present indications will improve as we get off from the influence of the cross-course. The lode in the rise in the back of the 105 fm. level east will yield 5 tons of mundic and ore per fathom. The lode in the rise in the back of the 70 east is 7 ft. wide, and yielding 12 tons of mundic per fathom. All other points continue without change.

**GOGINAN.**—J. Kitto and Son, Jan. 19: As intimated in our last report, during the last few weeks we have been unable to continue the driving of the 70, west of Francis's shaft, with the usual speed, in consequence of the men having been engaged in stopping the roof of the level, but we are pleased to state that the stope is now getting out of the way, and a stull has been put in, so we shall soon be in a good position for further testing the value of the lode at this depth; and seeing the 60 yielded good ore a considerable distance in advance of the present 70 forebore, we have every reason to expect by the extension of this level to open out a lengthened course of profitable ore ground. Meanwhile we shall prepare for sinking below this point, and thus prove the bottom of the mine both in length and depth. We may say that, as far as hitherto wrought, the lode in the stope has yielded from 12 to 15 cwt. of ore per fm. Some of the produce has been drawn to surface, which is now being dressed, and we shall soon have a nice parcel of silver-lead ore ready for the market.

**GREEN HURTH.**—J. Polglase, Jan. 17: The 41 end north is poor, but from appearances to-day we may expect a good vein shortly. No. 1 stope is worth 2 tons of ore per fathom. No. 2 stope is worth 2 tons of ore per fathom. No. 3 stope is worth 1½ ton of ore per fathom. No. 4 stope is worth 4 tons of ore per fathom. Stope in back of Standage is worth 3 tons per fathom. We have not yet cut the vein at the random of the 30, but shall in a few days, having met with a very hard limestone at the point of driving. All our other operations are progressing favourably, together with the dressing department.

**GUNNLSLAKE (OLITERS).**—J. O. Beccombe, C. W. Beccombe, Jan. 23: The lode in the 236 east is 3 ft. wide, producing saving work for copper ore. In this level west we are driving south to intersect the lode west of the cross-course. The lode in the 234 fm. level west is worth 5*l.* per fathom. The lode in the 212 east is 4 ft. wide; worth 7*l.* per fathom, and looking very promising. In this level west the lode is poor. In the 200 west the lode is producing saving work for copper ore. The lode in the rise in the back of this level east is producing occasional stones of grey and native copper ore. In the 183 east we are driving south to intersect the lode east of the cross-course. In this level west the lode is poor. The rise in the back of this level is worth 6*l.* per fathom. The 176 west is without change. The lode in the 164 east is worth 6*l.* per fathom. We are making all the progress possible in driving the 128 west, and find the ground to be more settled; and very soon we shall determine on cross-cutting to find our lode.—Crease's South Lode: The lode is 1 ft. wide, of a promising character, composed chiefly of spar, peach, and a little copper ore.

**HARDSHINS.**—Manager, Jan. 19: We have got to the north vein, which is a very strong one, containing a great quantity of mineral, consisting of spelter, quartz, and fluor-spar. We have not enough sill yet, and think had the level been driven further west we should have got sill sooner. When the vein is driven further west into the sill there will be more ore. The old man has evidently made a little attempt at this vein.

**HEALEYFIELD.**—John Trelease, Jan. 18: We have sunk 2 fathoms in the Whitwell shaft this week. There is a change in the strata, we are getting into a sill this morning. The last plate-bed sunk through is 5 fms. 2 ft. thick. We have again met with some open level at the Derwent, and will get up 40 fms. this week, which will take us in 600 fathoms from surface. Other 40 fathoms will take us up to the Whitwell shaft. We are up to a wide part of the level, where it is again closed; still, we hope a week will secure the run. The stope in the mine are yielding some fair bouce ore.

**HERODSFORD.**—Thos. Trelease, John Kutter, Jan. 24: Our shaftmen have finished taking up the water, and have secured the weak places in the shaft; it is now again in good working order. The men will now help to take away the ground that will pay at the 205. The stope continues to yield the same quantity as reported in our last report. The lode in the 175 end north has improved within the last few days, and looks likely for further improvement.

**HINGTON DOWN.**—Thomas Richards, Jan. 25: In the 52, east of the engine-shaft, the lode contains capel, quartz, peach, mundic, &c., and a little copper ore. The water is coming up from near the bottom of the level with more force, and I am hoping an improvement is near at hand. In the 40 east there is not much change; the lode continues to produce capel, quartz, arsenical mundic, &c., and occasional stones of copper and tin ore.

**KILLIFRETH.**—John Michell, Joseph Tamblin, Jan. 24: Engine-shaft: The lode in the 90 fm. level west at present is small and unproductive. In the 70 end west the lode is disordered with a crossing just passed through the lode. The lode in the wine below the 50, about 4 fms. in advance of the 70 end, is worth 12*l.* per fathom. There is no change in the lode in the 50 ends east or west. Four stopes in the back of the 50, west of cross-course, are worth 7*l.* 9*s.*, and 12*l.* per fathom respectively. We have still a large lode in the 40, west of Hawke's shaft, but nothing to value. Two stopes in the back, east and west of rise, are worth 6*l.* per fathom each. Our tribute pitches are returning their usual quantities.

**KIT HILL GREAT CONSOLS.**—Isaac Richards, Jan. 24: At the tunnel level the ground is without any important alteration, and the distance driven during the past week is 2 fms. 1 ft.—North Engine-Shaft: In the engine-shaft sinking below the 88 fm. level the lode is 5 ft. wide, of a very promising character, and yields a little tin ore. In the 88 fm. level east the lode is from 4 to 5 ft. wide, composed of capel and quartz, with peach, mundic, and a little tin and copper ore. In the 88 fm. level west the lode is 5 ft. wide, and is of a most promising character. In Spargo's wine, sinking in the bottom of the 75 fm. level west, the lode is from 4 to 5 ft. wide, composed of capel and quartz, with peach, mundic, and a little tin ore.

**LLANGELYN.**—O. Evans, Jan. 24: We expect to cut to the junction of the lode this week in the No. 1 level, and the end is very wet. The stope in back of No. 2 level is of the same character as last week, but has not so much blende, but is showing more lead. In reply to enquiries as to the graphite lode, it is a large vein or lode with well-defined walls, the hanging-wall of light blue flonkan, and the foot wall clay slate, and our expectations from it are of a very sanguine character, though we have not as yet got into the old workings. From these about 80 years ago many hundred tons were shipped off to the Isle of Wight.

**MELLANEAR.**—John Gilbert, Jan. 23: There is no alteration worthy of notice since last week in the 30 cross-cut, driving south of Gundry's shaft. The ground in the 70 cross-cut driving north of the main lode, is easy for progress and promising in appearance. The 80, east of Gundry's shaft, on the south part of the lode, is opening tribute ground. In the 100, west of shaft, the lode is 5 ft. wide, and yielding 3 tons of ore per fathom. The rise in the back of the 110, west of shaft, is yielding 3 tons of copper ore per fathom, and some rich work for tin. The lode in the 110, east of shaft, is 4 ft. wide, and yielding 2 tons of ore per fathom. The rise in the back of this level is also yielding 2 tons of ore per fathom. In the 120, east of shaft, the lode is 3 ft. wide, yielding 1 ton of ore per fathom, and looking kindly for an improvement. The rise in the back of the level is yielding 3 tons of ore per fathom. The lode in the 120, west of shaft, is 4 ft. wide, yielding 2 tons of copper ore per fathom, and good stones of tin. The rise in the back of this level is yielding 1½ ton of ore per fathom. Enlarging the rise for bringing down Gundry's shaft on the course of the lode is almost completed from the 100 to the 120.

**MID-DEVON COPPER.**—James Neill, Jan. 19: A Shaft: Sunk by 12 men (two men with rock-drills, and 10 by hand-labour) 1 ft. 5 in., making 7 fms. 4 ft. 5 in. below the 80. The character of the rock is still hard, and we are very near the lode, and look for a fine level greatly improved on getting down into this rock. The lode in the wine sinking in the bottom of the 50 is worth 20*l.* per fathom. The lode in the 35 west end, over the Carbons, is worth 10*l.* per fathom. There are no other changes.

**NEW CARADON.**—N. Richards, Jan. 23: We have no water in the shaft to interfere with our working as yet, and the men are engaged clearing and securing the same below the 12, which is now cleared about 10 ft. below the same. The branch that the men have been driving on at this, or the 10 level, appears to be heading south, and the men are driving in that direction to prove it.

**NEW KITTY.**—Wm. Vivian, Jan. 24: We are driving east of Thomas's shaft, on the course of West Kitty lode, at the 20. We have a very promising lode at this point. We shall resume the sinking of Thomas's shaft as quickly as possible. There is no change to notice at the other points of operation since last report.

**NEW TRUMPET CONSOLS.**—B. Quantrell and Son, Jan. 24: Wheel Valls Lode: The only alteration in the 28 west is in the character of the ground, which is better for driving, and the lode is letting out more water, which is a very favourable sign. The lode in the wine sinking below the 18 west never produced richer copper ore than it does at present. In the 16 driving west the lode at present is a little disordered, but a quantity of water is issuing from the bottom of the end, and we are expecting a speedy improvement. There is no change in any other part of the mine.

**NINNIS DOWNS.**—J. Oliver, Jan. 11: We have driven on the lode in the 12 5 ft. during the past week; the lode is still 12 ft. wide, and is producing good work, with a little more mundic than we have had. We have also taken down several tons of tinstuff from the back of the level for safety, and have cleaned away some stifle from the bottom of the old men's shaft, so that we may have more room to deposit our work previous to hauling to surface. We have the same number of men at work, and they have all worked full time.

**NORTH BLUE HILLS.**—S. Bennett, Jan. 23: The north lode in the adit west end continues much the same as last noticed, generally containing ore quality tinstuff, but not of much value.

**NORTH GREEN HURTH.**—J. Polglase, Jan. 17: From appearances we are getting near a vein in the deep level cross-cut. The south end from the deep adit is without any particular change; vein about 1½ ft. wide. We have an important piece of ground before us here. The numerous veins in the adjoining set we expect are before us, which may be intersected at any time. The level in the Hospital property is chiefly in clay, and rather troublesome at times.

**OKEL TOR.**—H. Bulford, J. Rodda, Jan. 24: We have commenced cross-cut at the 90 in the direction of the intermediate and south lode. We have not yet reached the hanging-wall of the north lode, which is now 12 to 14 ft. wide, composed of peach, sulphur, and arsenical mundic, and saving work for tin.

**PATERSYKE AND CLARGILL HEAD.**—J. Peart, Jan. 18: Top Level: We still have good ore at this point going south, a strong vein, and well mineralised, and the ore is setting up in the roof of the drift, and at present is worth 12 cwt. of lead ore per fathom.—Low Level: The top drift is a little easier to work, and as we drive south from the influence of the cross strength the vein is improving, both in mineral and in width; in the drift roof we get some good pieces of ore, and it is improving. In the low level forelead the east and west strength or veins still continue to cross, and is all mixed with ore, much that we are saving it for future use. This is well worth exploring both east and west at some future time. I think from the appearance of the veins at the points in the low level that we may soon have something better to report.







The statement of the Schwabs Gully Diamond Mining Company (De Beer's Mine) for November last shows blue ground hauled, 3225 loads, washed 6571 loads; blue ground on floors, 14,399 loads. Diamonds found 5304 carats, valued at £1122. 5s. 6d. Diamonds sold, 2315 carats, realising 28397. 16s. 9d. Receipts from other sources, 2387. 12s. 6d. The total working expenses were



26547. 1s. 11d. Advices have been received from Kimberley that a dividend of 5 per cent. will be paid for the quarter ending Dec. 25.

The letters of allotment of the Spitzkop (Lydenberg) Gold Mining Company have been posted. It is understood that the hydraulic machines to work the property have been ordered in California, and are to be delivered in England ready for shipment to the Transvaal during next month, and that specifications for a stamp-mill are being prepared.

The Arizona Trust and Mortgage Company are inviting subscriptions for 150,000. Seven per cent. Debentures, secured upon the uncalled capital and other assets, amongst which are \$1,330,000 Six per cent. Mortgage Bonds of the Arizona and New Mexico Railroad Company, and \$1,300,000 of the capital stock of the same line.

Carn Brea are quoted 1½ to 2 (call paid); there have been rumours of large relinquishments of shares both in Carn Brea and Tincroft, but these rumours are absolutely groundless, for Mr. W. Teague states:—"Not a single share in either of the mines has been relinquished."

Cook's Kitchen shares have fallen to about 7½ to 8½ per share, and it is already rumoured that another call will be necessary at the next meeting.

Devon Great Consols, 3½ to 4, and it is said that they are in demand, and scarce for delivery. The agents report that the Railway shaft which is being sunk with the object of finding rich deposits of tin as well as copper ore, is now being pushed down vigorously, the indications being such as to warrant the expectation of making good discoveries of tin, copper, and mundio ores. Watson's engine-shaft is now down over 11 fms. below the 100, producing 3 tons of copper and mundio ores per fathom.

Devon Great United, 2½ to 3; in the rise in the 120 the lode has opened out to 3 ft. wide, and is producing 2 tons of rich copper ore and mundio per fathom, and it is likely to improve, as the 104 west still continues to yield 4 tons of copper ore per fathom. The lode recently cut in the 60 west is 2½ ft. wide, producing good quality of copper ore and mundio and a little tin ore.

Drakewalls, 5s. to 6s.; the agents report that 10 tons of black tin will be sold early next week.

Ecton, 1½ to 2½; very great progress is being made at the mines; the new engine is bought, paid for, and erected, and work is being carried on in all departments with great activity. Some new discoveries of rich yellow copper ore have been made in the Ecton lode, of which splendid specimens have been received in London this week.

Kit Hill Consols, 2½ to 3; the tunnel level has been driven 13 ft. during the past week. The lode in the engine-shaft sinking below 88 is a fine lode, being 6 ft. wide, yielding tin ore; and the 88 east is 5 ft. wide, producing tin and copper ores.

South Devon United, 2½ to 3; the lode in Martin's shaft for the part being carried maintains its size, and is worth 20¢ per fathom.

West Frances shares have given way about 1¢ per share, to 7 to 7½. It is said the lode in the rise is looking about the same as for some time past.

West Seton, 7 to 8; the agent reports the lode in Mitchell's engine-shaft is worth 60¢ per fathom, and the winze below the 216 is worth 40¢ per fathom, and another winze below the 204 is worth 20¢ per fathom.

Asia Minor are reported to have improved; it is understood that dispatches have just been received from the Lidgessy mines announcing an important discovery in No. 1 district. By a cross-cut in No. 3 level they have pierced another lode, 4 ft. thick, thus showing the existence of two distinct lodes, instead of one as supposed. This discovery will be the means of greatly increasing the returns of ore.

California Gold, 9-16ths to 11-16ths; the mill run this week of 500 tons yielded 1100¢.

Ruby and Dunderberg, 2½ to 3; the weekly report does not advise any change of moment at the Home Ticket. The usual out-turn of ore has been maintained. The tributaries at the Dunderberg are doing well, 30 tons having been sent down since last report. The ground at the Lord Byron continues very hard still, thus delaying the work at this mine.

Kobinoor and Donaldson, 2½ to 3; the manager at the mine reports that he has had the engine at the new mill put under steam to try the working of the machinery now well nigh complete, and states that it is of sufficient power to drive with ease not only the machinery now in place, but also when required a duplicate of the present plant, which when added would render the mill capable of treating 100 tons of ore per day.

Victoria Gold (Venezuela), 2½ to 3; Vice-Admiral R. Ashmore Powell, C.B., who left this country in November for the purpose of inspecting this property, has forwarded a telegram, which arrived at the company's offices on Tuesday—"Mine exceedingly rich." This information is considered highly satisfactory to the executive, and the results of the first stamping looked forward to with renewed confidence.

In Lead Mine Shares there is virtually nothing doing, and quotations are entirely nominal. Lead appears to have a somewhat firmer tendency, but there has been no improvement in price. Vans are quoted 3½ to 3½; Great Laxey, 9½ to 10½; Weardale, 1½ to 1½. Tankerville, 2½ to 3; the discovery recently made at the 244 fm. level, on the main lode, is being laid open for about 3½ fms. in length, and for the width carried (5 to 6 ft.) it is worth 2 tons of lead ore per fathom in the east end, and 1½ ton in the west end; and the winze below the 232 is worth 3 tons per fathom. This looks well for finding rich deposits of lead both at the junction in length and depth.

Roman Gravel, 5½ to 6½; the managers report that the various levels and ends are producing their usual quantities of ore, and a considerable improvement is expected in the ends of the 95 and the 80 south in the next 3 or 4 fms. driving.

The Bank of Egypt directors, subject to the passing of the accounts by the auditors, have decided to recommend a dividend of 9 per cent. for the year ended Dec. 31, of which an interim dividend of 2½ per cent. has already been paid, leaving a balance of 422½ 6s. 7d. to be carried forward to the next account.

Notice is given that the Tournay to Jurbise and Landen to Hasselt Railway Company's receipt tickets given for the deposit of "talons" can now be exchanged for the new sheets of coupons.

It is notified that the interest due Feb. 1, on the Five per Cent. (Tirek Extension) Debentures, of the Ottoman Railway from Smyrna to Aidin, of his Imperial Majesty the Sultan, will be paid at the company's offices in London, and the scrip will be exchanged for the Definite Debentures, with coupons attached.

Referring to the New Atlantic Cable, Messrs. Mackay and Gordon Bennett have concluded a contract for the use of the Muirhead patents, for the duplex working of their two Atlantic cables, whereby the carrying power of the cables will be practically doubled, in other words, that Messrs. Mackay and Bennett will have an effectual power of transmission equal to four Atlantic cables by using that duplex system. The apparatus for thus increasing the transmitting capacity of the cables is being manufactured by Latimer, Clark, Muirhead, and Co., of Westminster.

The London Cordage, Sack and Wagon Cover Company directors have declared a second interim dividend for the half-year ended Dec. 31, at the rate of 10 per cent. per annum on the paid-up capital of the company, payable at the offices of the company on and after Feb. 1.

The London, Chatham, and Dover Railway accounts for the past half-year were on Wednesday submitted to and approved by the board and, subject to final audit, they show a balance available for dividend of 171,500¢, as compared with 162,500¢ for the corresponding half of 1882. The directors propose that a dividend of 2½ 5s. per cent. for the half-year be paid on the Arbitration Preference stock, carrying forward 48,800¢ to the credit of the current half-year, as compared with 36,800¢, corresponding period of last year.

**GAS SHARES.**—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been:—Bahia (Limited) Ordinary, 22½ to 22½; Bombay (Limited), 6½ to 6½; ditto, ditto, New, 4½; British, 39½ to 40½; Buenos Ayres New (Limited), 10½ to 10½; Commercial New Stock, 178; Continental Union (Limited) Ordinary, 23½ to 23½; ditto, ditto, New, 1860 and 1872, 23 to 23½; ditto, ditto, 7 per cent. Pref., 29; Gas Light and Coke, A, Ordinary, 20½ to 20½; ditto, D, 10 per cent. Pref., 226 to 226½; ditto, H, 7 per cent.

Max., 143 to 144; ditto, J, 10 per cent. Pref., 224½; ditto, 6 per cent. debenture stock, 150 to 152; Imperial Continental, 188 to 189½; Monte Video (Limited), 16 to 16½; Oriental (Limited), 7½ to 7½; Rio de Janeiro, (Limited), 24½ to 25½; South Metropolitan, A, 248; ditto, B, 213½ to 217½; ditto, Perpetual 5 per cent. debenture stock, 126½ to 127. Gas stocks firm, especially Imperial Continental, very little offering.

**INSURANCE SHARES** have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—City of London Fire (Limited), 2½ to 2½; Commercial Union, 18½ to 18½; Eagle, 5½; Employers' Liability Assurance Corporation (Limited), 2½ to 2½; Fire Insurance Association (Limited), 2½ to 2½; General Life and Fire, 3½; Globe Marine (Limited), 1½ to 1½; Guardian Fire and Life, 63 to 63½; Liverpool, London, and Globe (L. annuity), 24; London, 56½ to 56½; London and Provincial Fire (Limited), 3½; ditto, ditto, Marine (Limited), 4½; Marine (Limited), 27½; Merchant Marine (Limited), 1½ to 1½; National Marine (Limited), 2 to 2½; North British and Mercantile, 24½ to 25½; Ocean Marine, 8 to 8½; Standard Fire Office (Limited), 3½ to 3½; Universal Marine (Limited), 5½ to 7; Insurance steady; Marine companies firm upon good reports which have just been issued.

**TRAMWAYS.**—The closing prices of this evening, as quoted by Mr. J. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

**RAILWAY AND GENERAL MARKETS.**—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk Birchall, writes:—"Opening: American railway shares have the same undecided tendency as they had yesterday and the day previous. Pending the deadlock at New York the public here are neither buying nor selling to any considerable amount. Erie, 25½ to 26; Reading, 27½ to 27½; Denver, 21 to 21½; and Atlantic First Mortgage, 44½ to 44½; Great Eastern are 60½ to 60½; and Brighton, A, 105 to 105½, showing no change. Trunks are rather in demand, the Ordinary now being 16½ to 16½, and the Third Preference 37½ to 37½. Apart from a recovery in United Mexican and Devon Great Consols, mining shares have had a downward tendency. Bratsberg, 1½ to 1½; Akankoo, 5s. to 5s.; Colombian Hydraulic, 4s. 6d. to 5s. 6d.; Callao Bis, 12s. to 14s.; Old Shephards, 4s. to 5s.; East Wheel Rose, 3s. to 5s.; Home Mines Trust, 10s. to 12s. 6d.; Wheel Crebor, 1½ to 1½. Closing: Trunks continue firm, the Second Preference being now 75, and Third 38; Erie are quoted 26 to 26½; Richmond, 4½ to 4½; Ruby, 3½ to 3½; Ecton, 13½ to 13½; Colorado, 2½ to 2½; Copiapu, 2½ to 3½; Emma, 3½ to 4; Frontino, 1 to 1½; La Plata, ¼ to ¾; Potosi, 3s. to 4s.

**IRON IN NEW SOUTH WALES.**—In our advertising columns will be found a remarkable invitation addressed to the ironmasters of Europe and America by the Government of New South Wales. This prosperous colony is very rich in iron and coal of excellent quality. The Government has within a few years constructed over 1200 miles of railroad, and more than 500 miles are in course of construction, all the materials for which, except the sleepers, have been imported at a heavy charge in the way of freight, &c., from England. These charges should operate as a large "protection," and afford great inducements to enterprising men to embark in the manufacture of iron and steel in the colony. It is stated that 1,250,000 tons of iron and steel, inclusive of permanent way material, have been imported into New South Wales and Victoria within the last 10 years. The Government has determined to make a bold experiment to naturalise the iron industry in the colony, and has, in the terms of the notice which we publish to-day, called for tenders for 150,000 tons of steel rails (or any portion thereof) to be manufactured in the colony from New South Wales ores. Printed copies of preliminary specifications, conditions of contract and other particulars may be had from the Agent-General of the colony, Sir Saul Samuel, K.C.M.G., Westminster Chambers, Victoria-street, London, S.W., by ironmasters and others desirous of obtaining authentic information on the subject.

**OSCAR GOLD MINING COMPANY.**—The prospectus of this company has been most favourably received. The latest news from Norway also states that great excitement continues there respecting this wonderful discovery of gold. It will be seen by our advertising columns that the list of applications for shares will close on Wednesday next, 30th inst.

**BRATSBERG.**—An excellent report from the managers has been received this week. The aggregate value of the various points in operation is nearly 550¢. This will soon be increased by the resumption of work at several rich places. The dressing of ore continues as usual, and there is a cargo at Skien waiting shipment, with another lot to follow next month.

**CATHEDRAL CONSOLS MINE.**—This mine is deserving of special attention. At the end of the present month the shaft will be down to the depth necessary to start the cross-cut to the Old Mine lode, which, when worked on above by the old workers, was reported by the late Capt. Jennings to average 11 ft. wide west and 6 ft. wide east. Another important feature is the extension of the 50, which, being in easy ground, was driven last month 9 fms. In about 25 to 30 fms. it will come up parallel with the rich bunches of copper ore taken away in West Damsel. Captain Jennings considered Cathedral "one of the best pieces of unwrought mineral ground in the neighbourhood," which is Gwennap.

**WHEEL BENNY.**—The new ground extending towards Devon Great Consols, which has recently been acquired will, writes a correspondent, enable the mine to be worked 200 fms. beyond the old boundary. The lode in that direction is producing 4 to 5 tons per fathom of tin and arsenical ores at the deep adit. Every fathom driven on the lode improves, and in sinking no doubt is entertained of meeting with a great deposit of ore near the junction of the lode with the cross-course at about the same depth where Devon Great Consols made so wonderfully rich many years ago.

#### VALUABLE COPPER MINES.

**REQUIRED, ONE OR TWO GENTLEMEN** who could FORM a COMPANY for WORKING a MOST VALUABLE COPPER MINE, with several lodes of ore yielding 28 units. As the mine can be successfully developed with a moderate capital, Advertiser would also join some capitalists wishing to secure a genuine and profitable investment.

Address, "Copper 11,247," care of Messrs. Wm. Dawson and Sons, Advertising Agents, 121, Cannon-street, London, E.C.

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,** 29, BISHOPSGATE STREET, LONDON, E.C. (Established 30 Years) CAN SELL the following SHARES at prices annexed:—

Can Akankoo, fully paid, 10s. 6d.	20 Frontino, £1 7s. 6d.	100 Potosi, 4s.
25 Bratsberg, £1 13s.	20 Gunlake (Clitters), £1 12s. 6d.	50 Parys Corpora., 2s. 6d.
25 Birtsey Ck., £1 5s.	25 Home Mines Trust, 10s. 6d.	25 Ruby, 16s. 3d.
50 Colombian Hyd., 5s. 9d.	10 Leadhills, £2 17s. 6d.	10 Richmond, £4 10s.
40 California Gold, 12s. 6d.	35 La Plata, 13s. 9d.	10 Roman Gravel, £5 5s.
75 Corporation of South Australian Copper.	20 Lisbon-Berlyn, 4s. 6d.	10 South Darren, 10s. 6d.
50 Callao Bis, 12s. 9d.	50 Mounts Bay, 3s.	50 Sordridge Con., 2s.
30 Chile Gold, 12s.	20 Newcastle, £2.	25 So. Caradon (Lid.), 12s.
100 East Bales, 4s. 3d.	75 Nouveau Monde, 4s. 3d.	20 South Devon, 7s. 6d.
25 Colorado, £2 7s. 6d.	20 New Emma, 20s.	50 Tankerville, 1s. 5d.
30 Carn Camborne.	25 New Trumpet Consols.	20 Tolima A, cum div., 1½s.
10 Devon Con., £3 10s.	75 New W. Caradon, 3s. 6d.	20 do B.
50 Dev. Friendship, 3s.	50 Old Shephards, 4s.	10 United Mexican £10.
20 Drakewalls, 5s. 6d.	10 Organos, 16s. 6d.	50 West Crebor, 4s.
50 Eberhardt, 7s. 3d.	10 Panulillo, £5 17s. 6d.	50 West Caradon, 3s.
25 East Blue Hills, 3s. 6d.	100 Port Phillip, 2s. 3d.	10 West Crebor, £1 17 6
40 East Bales, 4s. 3d.	25 Prince of Wales, 10s. 3d.	25 Western Andes Gold £5 5s.

**VICTORIA GOLD (Venezuela).**—I strongly recommend the immediate purchase of these shares for an important rise; also CORPORATION OF SOUTH AUSTRALIAN COPPER.

**PURCHASES FOR FORWARD DELIVERY AT SPECIAL PRICES ON RECEIPT OF DEPOSIT OF 20 PER CENT.**

BUYER of any part of 250 VICTORIA GOLD (Venezuela). BANKERS: ALLIANCE BANK (Limited).

**HORACE J. TAYLOR, 38, GREAT ST. HELENS, LONDON, E.C., STOCK AND MINING SHARE DEALER.**

Offers FOR SALE the undermentioned, at annexed prices:—

Bratsberg, £1 16s. 3d.	Flagstaff District, 2s.	Organos, 16s. 3d.
California Gold, 13s. 3d.	Frontino, £1 7s. 6d.	Orita, 16s.
Callao Bis, 12s.	Gold Coast, 8s.	Parys, 2s. 6d.
Chile Gold, 12s.	Gunlake (Clitters), £1 12s. 6d.	Potosi, 4s.
Chontales, 4s.	Home Mines Trust, £1 12s. 6d.	Prince of Wales, 10s. 6d.
Colombian Hyd., 5s. 9d.	Killbreth, 18s. 9d.	Ruby, 16s. 3d.
Corporatn. So. Austr.	La Plata, 14s.	Sordridge, 2s.
Copper.	Lima Consols, 3s. 6d.	South Caradon, 11s. 3d.
Devon Consols, £3 6s. 3d.	Mounts Bay, 3s.	South Darren, 11s.
Devon Friend., 2s. 9d.	New Emma, 20s.	S. Devon Utd., 7s.
Drakewalls, 5s.	Nouveau Monde, 4s.	Tresvean, 5s.
East Blue Hills, 3s. 3d.	Old Shephards, 4s.	Uni. Mexican, £9 5s.
East W. Rose, 4s. 3d.	Port Phillip, 2s. 3d.	Victoria Gold, 17s.
Eberhardt, 7s. 3d.	25 Prince of Wales, 10s. 3d.	Wheel Crebor, £1 17 6

**TOLIMA A and B Shares** and CORPORATION SOUTH AUSTRALIAN COPPER are particularly recommended.

BANKERS: CENTRAL BANK OF LONDON (Limited).

**MESSRS. PENNINGTON AND CO., SWORN BROKERS AND SHARE DEALERS, 13, MOORGATE STREET, LONDON, E.C.**

**BUSINESS in all DESCRIPTIONS of STOCKS, MINING and other SHARES. ESTABLISHED 1869—BANKERS: ALLIANCE (Limited).**

#### C. PASS AND SON, BRISTOL,

ARE BUYERS OF  
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,  
ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c.  
and DROSS or ORES containing  
COPPER, LEAD, AND ANTIMONY.

**GEO. G. BLACKWELL,**  
26, CHAPEL STREET, LIVERPOOL,  
HANDLES  
MANGANESE, BARYTES, SPARS, and ALL ORES on SALE  
or PURCHASE.

**EDGAR JACKSON,**  
(Associate Royal School Mines),  
ANALYST AND ASSAYER,  
Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and other Ores.  
ASSAYING TAUGHT.  
106, QUEEN VICTORIA STREET, LONDON, E.C.

**ALLAN FORSYTH,**  
MINING ENGINEER,  
LYDENBERG, TRANSVAAL REPUBLIC.  
INSPECTS, AND REPORTS FURNISHED ON TRANSVAAL MINING PROPERTIES.

**JOHN LYSAGHT (LIMITED),**  
BRISTOL SPELTER WORKS,  
BUYERS OF  
ZINC ASHES, ZINC OXIDE, HARD SPELTER,  
CALAMINE, &c.

**Messrs. E. LLOYD-OWEN AND CO.,**  
41, THREADNEEDLE STREET, LONDON, E.C.,  
MINING, CIVIL, AND CONSULTING ENGINEERS, AND CERTIFICATED  
COLLIERY MANAGERS.  
Are prepared to INSPECT, REPORT UPON, VALUE, or TAKE THE MANAGEMENT OF MINES, COLLIERIES, or ENGINEERING WORKS  
at Home or Abroad upon moderate terms.

**JOHN M. STUART,**  
CONSULTING MINING ENGINEER,  
ANALYST AND ASSAYER,  
OFFICES:  
11, QUEEN VICTORIA STREET, LONDON, E.C.

**BRENTON SYMONS, F.C.S., Assoc. Mem. Inst. C.E.,**  
CONSULTING MINING ENGINEER, TRURO,  
On his return from the Algerian Mining Districts early in November, will be prepared to undertake the INSPECTION—geologically or otherwise—of MINERAL PROPERTIES at home or abroad.  
Eighteen years' experience in the Management of Gold and Copper Mines (both by Wet and Dry Reduction) in Central America, Venezuela, Hungary, Turkey, &c.

**MESSRS. J. AND J. BANNER,**  
BROKERS,  
LIVERPOOL.

BUYERS AND SELLERS OF MINES, MINERALS, &c.  
COMPANIES FORMED ON EQUITABLE TERMS.

**J. A. JONES,**  
MINING ENGINEER,  
GIJON (ASTURIAS), SPAIN.  
Mines inspected and reported on. Assays and valuations effected.  
Has on hand offers of Mines of Copper, Calamine, Blende, Phosphate of Lime, Tin, Lead, Iron, Manganese, and Manganiferous Iron Ores.

**MINE "EL GUAYANA,"**  
GUAYANA, VENEZUELA.  
32,200 SHARES.

Gold in bars produced in the month of November, 1883, remitted to Messrs. Baring Brothers and Co., London—12,209.86 ozs.

DIVIDEND distributed for each Share, 16 francs.  
(Signed) A. IRE. CAGNINACCI, Vice-President.  
(Signed) VICTOR T. GRILLET, Treasurer.

**THE CANADA PACIFIC IRON AND STEEL RAIL COMPANY.**

The Subscriber is desirous of opening communication with some party in England for the purpose of organising the above company. One thousand acres of red hematite ore not far from the line of the C. P. R.  
Address, HUBERT C. JONES, Solicitor, Brockville, Ontario, Canada.

**C. E. HALL, MEERSBROOK BANK.**  
SHEFFIELD.

Makes a Speciality of the following Machinery suitable for Mines, Collieries, &c.:—

THE "MULTIPLE ACTION" CRUSHER.  
THE PATENT SECTIONAL CRUSHER in STEEL and Cast Iron for FOREIGN TRANSPORT.

THE EXCELSIOR ELEVATOR AND CREEPER.

THE ECLIPSE DRIVING CHAINS, instead of Gearing and Belting—POSITIVE DRIVING.

THE UNIVERSAL PULVERISER, for reducing Ores, Quartz, Lime, Phosphates, Cement, &c.

PATENT CORNISH CRUSHERS, with Hall's Patent Universal Tension Springs, instead of Levers and Weights.

Coal Washing and Dressing Machines for Coke Making.

THE SMALL COAL IS DRIED AS IT PASSES OFF THE MACHINE.

Wet Coal Grinding Machines, Coal and Slack Elevators, &c.

Write for Catalogues.

**GREENWAY BREAKWATER.**

DEEP-SEA HARBOURS AVAILABLE AT ALL TIMES OF TIDE, at a cost of from £7500 upwards, constructed everywhere in a few months.

For full particulars, address E. C. GREENWAY THOMAS, Esq., 376, Strand, London, W.C.

**FORESHORE PROTECTION.**

GREENWAY BREAKWATER.—Land protected from the destructive action of the waves at £1 the running yard. Most effective when the Sea is most violent.

For full particulars, address E. C. GREENWAY THOMAS, Esq., 376 Strand, London, W.C.

Just Published, Octavo, Pages 368, Price 8s. 6d.

**THE NEW LAW OF PATENTS, DESIGNS, AND TRADE MARKS,** being the Principles of the Law, the new Act fully annotated with Cases, &c., the Rules and Forms, a Time Table, and copious Index. A complete practical Treatise.

By E. MORTON DANIEL, Barrister-at-Law.  
London: STEVENS and HAYNES, 13, Bell-yard, Temple Bar.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Jan. 22—Fordale	100	2 8 1	6	Quirk, Barton, & Co.
24—Tankerville Gt. Con.	30	6 18 6	0	Walker, Parker, & Co.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Jan. 19—Talsore & Gronant	100	4 2 0	0	Vivian and Sons.]
—ditto (allite)	10	2 15 0	0	ditto
24—Tankerville Gt. Con.	25	4 3 0	0	ditto
—ditto	15	3 8 0	0	ditto



## ROYAL MINING ACADEMY AT CLAUSTHAL (GERMANY).

72ND SCHOLASTIC YEAR, 1883—1884.

The PRACTICAL PREPARATORY COURSE and the LECTURES of the SUMMER HALF-YEAR will COMMENCE 24th APRIL, 1884.

Programmes to be had (gratis) of The Director—

BERGRATH DR. V. GRODDECK.

### Notices to Correspondents.

**POTOSI GOLD.**—An agreement has this day been signed by which all litigation between the Chile and Potosi Gold Mining Companies ceases, and the two companies will in future work in harmony with each other. As witness our hands this 23rd day of January, 1884, E. L. J. Risdale, Chairman Potosi Gold Mining Company (Limited); John Hawey, Chairman Chile Gold Mining Company (Limited).

**PRICE OF MINE SHARES.**—Can you, through the correspondence column of your Journal, give me any information why Great Holways are quoted in your mining list at 5 to 5½, and in the same paper, under the heading "Scotch Mining, &c.," are given at 40s. to 50s. Now, the latter price is the correct one, as I have been offered shares at these prices by several dealers for some time past, but still there has been no alteration in your official list. It seems rather an anomaly to me, and I should be obliged if you could give me any information with reference to it.—S. N., Chesterfield. [The quotations given in the Share List are those supplied from the company's offices as the prices at which transfers have been registered. In the present condition of the lead market some holders are willing to sell at any price.]

**FOUNDERS' SHARES.**—"K. R. Z."—There is certainly nothing of which the ordinary shareholders can reasonably complain in the way the founders' shares are dealt with—they are to be simply extinguished. The statement of present capital and proposed distribution of new capital is given in another column.

**UTILISATION OF SLATE RUBBISH.**—A letter addressed to Messrs. Shepherd and Aspinwall, Nantlle Vale, with reference to their patent for converting slate rubbish into artificial stone, has been returned "insufficient address." Will they kindly send exact postal address.—B. B. S. and S. Co.

**COLORADO UNITED.**—Replying to a question asked by your correspondent "Fisaur," in last week's Journal, I beg to inform him that the dividend of 1s. per share paid to the shareholders in May last was paid out of the product of the mine. Had he carefully read the last balance-sheet issued by this company he would have seen that it was only made up to March 31, 1883, and therefore could not take into account a dividend paid six weeks after that date.—DANIEL NORRIS, Secretary.

**Received.**—"J. R." (Old and New Placers): Never received, please send duplicate. Present letter not dated, but see from postmark that it was sent Jan. 8. Kapanga next week; just going to press—"S. P."—"K.C.B."—"Shareholder" (Bristol): As meetings of the mines of the East of Wales Rose group, to which you refer, will be held next week, you will then, no doubt, obtain the information you require—"G. T." (Carlisle): ditto—"Shareholder" (Ayr): It is always preferable to use initials than "Shareholder"; we have about 14 using the same signature this week; we have inserted your letter over initials—"H. J.": You cannot get anything better than Newth's Natural Philosophy and study it carefully, then the Steam-Engine, in Cassell's series—"G. H. O."—"G. B. B."—"C. M." Toronto.

## THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JANUARY 26, 1884.

### THE COMING SESSION.

During the Parliamentary interregnum it is the privilege of the journalist to direct the attention of the various representatives of the great mining and manufacturing interests to questions of pressing moment requiring solution or modification. For the past two or three sessions useful home legislation has been seriously impeded by the prolonged discussions which have been carried on in reference to the unhappy condition of Ireland. The House, however, is now armed with measures which will prevent, to some extent, at least, the obstructive policy of Irish agitators, and we may, therefore, look forward pretty confidently to the next session as affording the opportunity for the discussion and settlement of questions which have long pressed for calm consideration, and which are intimately associated with the great commercial and manufacturing interests of the kingdom. Of one thing we may be certain, and that is that the several heads of the departments are fully alive to the vital importance of further legislation affecting our trade and commerce, and are pledged to do their utmost to secure immediate action in reference thereto.

In our last number we drew attention to the important question of railway freights and fares, urging upon our great railway companies the policy of making such concessions and granting such increased trading facilities as would satisfy the just claims of the manufacturers and traders of the country. We urged that Chambers of Commerce and the various representative bodies should take the matter up with the view of supporting the Right Honourable JOSEPH CHAMBERLAIN, the President of the Board of Trade, in the important question which he is pledged to bring forward at the earliest possible moment. Already is the ball set rolling, which we believe will increase in momentum until it shall obtain an answer in practical legislation, fixing standard carriage freights at much lower terms per mile than at present, and compelling further facilities at the hands of railway companies than they now appear willing to grant. A most important meeting of traders connected with the iron, coal, and hardware trades of the Midland counties was held at Birmingham a day or two since, when a "Freighters' Protection Association" was formed, the object of such Association being to raise a guarantee fund for all purposes connected with the objects of the Association, (2) to report to the railway companies the many cases of hardship to which traders are subject, and to show that their true interests would be best served by assisting rather than crushing the traders and manufacturers of the district, and (3) to assist individual traders, being members of the Association, in dealing with cases of unequal or excessive charges. At this important meeting of manufacturers and traders many instances were cited of the way in which our inland ironmakers, &c., are handicapped by these excessive railway freights, and how they prevent that expansion of trade which would otherwise ensue. For instance, the Chairman (Mr. ALFRED HICKMAN, the Chairman of the Wolverhampton Chamber of Commerce) stated that the freight of corn from Chicago to New York, a distance of 960 miles, was only 16s. per ton, the same as charged from Birmingham to London, just one-eighth of the distance. It was also stated that English freights were at least double those on the Continent. Statistics were also quoted which showed that every ton of pig-iron produced in the Staffordshire district paid 10s. per ton railway carriage; every ton of manufactured iron 15s. per ton; and every ton of finished hardware 55s. per ton. Every unprejudiced mind must be at once convinced that with such a heavy millstone hanging around the necks of the manufacturers they can scarcely expect to compete with the Continental and American makers, and the wonder is that they are not crushed out of existence by such oppressive freights.

The question of freights is one of such vital importance, not only to the manufacturers and colliery proprietors of the country, but of the railway companies as well, that our readers will doubtless excuse us for endeavouring still further to press home the question. We contend that all past experience proves that the soundest commercial and railway policy would be a substantial reduction in all mineral and manufactured traffic. The nimble penny is far better every way than the laggard sixpence. Reductions always vastly benefit and increase trade. Only a few years ago the third-class passenger traffic was despaired; but now, though only partially de-

veloped, it is a veritable mine of wealth. We guarantee that no prudent railway chairman or director would think of returning back to the old third-class fares; and we venture to prophesy that if the same policy was adopted with respect to the mineral and goods fares the same happy result would follow—a large increase of business, in which the manufacturer and the railway would equally benefit. This, then, is one important question which we may expect to see occupying the attention of the Legislature next session, and upon which, doubtless, pronounced action will be taken, more especially as the measure has been taken in hand by the President of the Board of Trade—a gentleman who is not likely to be thwarted in what he believes for the best commercial interests of the country by railway directors, however loud in their denunciations.

Turning to colliery matters, there are one or two questions which we should like to see receiving further Parliamentary consideration and decision. The great object in the winning of coal is to do so with a minimum loss of life. Colliery proprietors have unquestionably been harassed a good deal of late years by what all practical men cannot but regard as unnecessary and uncalled-for restrictions and regulations. If some of our prominent representatives had only been equally solicitous in their efforts to prevent colliery explosions as to impose fines and penalties for the breach of impractical rules and regulations, much more good would have resulted. Without now quoting facts or statistics, we may allege, without fear of contradiction, that defective lamps and shot-firing bring about by far the greater number of explosions, and, consequently, loss of life. And yet our Government has scarcely taken a single step to insist upon the adoption of precautionary means in this direction. We are quite aware that a really "safe safety lamp" has not yet been invented—that is to say, one which may be depended upon under all and every circumstance. But we do not think it would be any very great stretch of Government jurisdiction to offer some substantial inducement to incite mechanical and scientific ingenuity in the perfection of a lamp which should answer every requirement of the collier. And a standard lamp being once adopted, its use should be strictly enforced by Parliamentary enactment, and every other lamp condemned. With the same object in view, shot firing—all blasting operations in mines—should be prohibited under any and every circumstance, any breach being severely punished. With such regulations enforced we should soon see a marked diminution in the number of explosions, and, consequently, valuable lives spared and much destruction of property prevented.

The Employers' Liability measure, although doubtless framed with the best intentions, is found, in its practical operation, to harass and perplex the manufacturers and large employers of labour in a manner which few of the uninitiated have any conception. Some of its provisions press with undue severity, and should be modified if it is intended to meet with the cordial acceptance of all classes. It is a question which must, sooner or later, push itself to the front and demand Legislative attention, as scarcely a county court is now held in any important manufacturing centre in which employers are not sued for damages for accidents altogether beyond their control. Other questions of vital moment to the manufacturing and commercial interests of the country will doubtless be brought forward, and the next session, which opens on Thursday next, the 5th proximo, will be one of the most important, as regards home legislation, for many years past.

### WEST RIDING COAL FIELD, AND PORT OF GOOLE.

With the prospect of increased competition for the coal traffic from the West Riding for shipment from the Humber, as well as for local requirements, the Aire and Calder Navigation Company have brought forward an important scheme for widening and deepening the channels and increasing the dock accommodation. This they propose doing at a cost estimated at 250,000l., and for which an Act of Parliament is to be obtained. The money, it is expected, will be borrowed at from 3 to 3½ per cent. interest, and on the understanding (provided in the Act) that the dues charged shall not produce more than a maximum return of 5 per cent. on the capital expended. The terms offered by the company appear to be exceedingly fair, and as the improvement will be carried out under the superintendence of Mr. BARTHOLOMEW, the well-known engineer, who knows every part of the route, they will be most complete and thorough, and be of great advantage in the shipment of coal more especially. Briefly stated, the improvements will include the deepening of the channel, so as to allow vessels of large size to come up at all times, whilst the navigation of the Ouse between its confluence with the Trent and the port of Goole will be made comparatively easy. Owing to the limited depth of the water in some places vessels at times are stopped in their passage, and, of course, at considerable loss, as some of them have to be lightened. The consequence is that the insurance rates are higher to Goole than to other ports close to the sea. The deepening of the river and the other improvements contemplated will, however, have the effect of making Goole one of the best and most important inland ports in the kingdom. At the present date it ships large quantities of coal from the South Yorkshire district to London and other home ports, and in this respect exceeds the exports from Hull and Grimsby combined. Goole is in fact the nearest shipping port from all parts of the West Riding, and vast quantities of coal are now sent from several districts, the facilities for loading vessels being of an exceptional character, so that a cargo of 300 or 400 tons can be discharged into the hold of a steamer in considerably less than two hours. But Goole is likely to be still further benefited by having a coal field quite close to it.

From the exhaustive report of the Royal Commission it is stated that the eastern limit of the Yorkshire coal basin extends to the neighbourhood of Snaith and Drax, only some six miles from Goole by railway. The coal lies under the magnesian limestone, and a bore-hole put down to a depth of 400 yards on the estate of Lord BEAUMONT gave most satisfactory results. After going through the New Red Sandstone, Upper Permian, marls and other strata, the borer pierced 63 yards of Lower Permian limestone, when the carboniferous measures were touched, giving coal measures, sandstone, blue shale, black shale, then 18 in. of coal, with spavin and blue shale. Mr. GREAVES, the mining engineer, who conducted the operations, considers that the beds penetrated beneath the Permian rocks were the coal measures, whilst there were strong indications for believing that they belonged to that part of the coal measures which contained workable seams of coal. The general character of the measures, the few fossils brought up in the cores, and the clean and lustrous character of the thin seam of coal which was passed through, pointed most forcibly to this conclusion, and that in the future the best portion of the Yorkshire coal field would be found between Barnsley and Snaith. It is, however, expected that boring will, before long, be resumed on the same estate, and that the Barnsley Nine-feet seam will be met with at a depth that will make it easily workable. With such a prospect the Navigation Company owning the port of Goole are more than justified, it will be admitted, in improving the rivers connected with it, as well as extending the dock accommodation, for in the event of a coal field being opened out at Drax and Snaith, it would become a most formidable rival even to

Newcastle, more especially as regards the coal traffic to the Metropolitan, to which it is so much nearer. In conclusion, it may be stated, that the Aire and Calder Navigation was opened in 1827 (but of course frequently and greatly improved since then), and the Knottingley and Goole Canal in 1826. The dues have greatly increased during the last few years, and the last annual return gave them at something closely approximating to 3,000,000 tons.

On Wednesday the standing orders applicable to the Ouse Improvement Bill were stated by the Examiners of Petitions to have been complied with. There is no impediment, therefore, to the Bill being introduced to Parliament in the early part of the session.

### THE BREAKING OF MINING WINDING-ROPE.

Of the many fatalities resulting from mining operations those from the breaking of winding-ropes are of comparatively rare occurrence. This might be expected, seeing that there are simple appliances that effectually prevent them, and precautions for the same purpose are provided by Act of Parliament. Still, last week we had to record an accident, resulting in the loss of 11 lives by the breaking of a winding-rope. The rope consisted of six strands of seven cords each, and when lifting coal the usual weight was 47 cwt., but when it broke the weight was only 30 cwt. The Mines Regulation Act provides that the ropes which are in actual use shall be examined at least once in every 24 hours, and in many mines this is done every morning before the men are let down. The Act also states that the result of such examination shall be recorded in a book kept at the mine for the purpose, and shall be signed by the person who made it. Whether this was done at the Garnant Colliery we cannot say, but it may be taken as a fact that when ropes are good, and not overworked, and have proper attention paid to them and other mechanical details connected with their application, there is no safer method of ascending and descending pits. But the danger arising from ropes or chains breaking can be prevented by the use of safety-cages, of which there are several patented, the oldest being those of FOURDRINIER, WHITE and GRANT, OWEN, &c.

OWEN's apparatus is connected by rods to the rope, so that if the rope breaks the rods fall, and the two levers are forced down by a spring, causing the end of one of the levers to pierce into the conductor-rods and so hold the cage fast. This cage at one time was to be found in many collieries in Lancashire, and probably is so now; it saved many lives. WHITE and GRANT's has an eccentric, which is kept from the guide by a chain whilst the cage is suspended. When the chain slackens the spring forces the cog against the guide, when the weight of the load forces the teeth of the eccentric into the guide. This system has been adopted at many places, and with marked success so far as the saving of life is concerned. With the simple appliance within reach, and with the precautions which should be taken at all mines before work is commenced in the morning, it certainly appears that accidents or loss of life from the breaking of ropes in shafts of mines should be all but impossible.

### SINGULAR COLLIERY FATALITY FROM NEGLIGENCE.

It is not often that one hears of corves being allowed to drop down a shaft owing to the absence of the cage, yet this was the case on Monday last at the Morley Main Colliery, near Leeds. It appears that two or three seams of coal are worked, one being entered immediately in the shaft some distance from the bottom. The hanger-on at one of them got into the cage from the intermediate seam to find something he required at the bottom, and just as the cage reached the latter there was a heavy fall of material, which drove the deceased, Thomas Thompson, into the sump. There the body was found, along with two corves in a broken state. It appeared that a hurrier in the intermediate seam pushed two corves to the shaft believing that the cage was there to receive them. The consequence was that the corves fell to the bottom just as the deceased was getting out of the cage, and striking him forced him into the sump along with the corves and fallen material. Jackson, the hanger-on at the intermediate seam when the cage went down, should have shut a gate that would have closed that part of the shaft, so that the corves could not have fallen down. His not having done so was an act of gross negligence, and resulted in the loss of one life and might have been far more serious. Indeed, the deputy who went down with the deceased had a most narrow escape. An inquest was held on the body of deceased on Wednesday, at which Mr. Waddell, the Government Inspector, was present. The jury returned a verdict "that Thomas Thompson had met with his death through Jackson's negligence." The Coroner said this was in fact a verdict of manslaughter, and a verdict to that effect was recorded. It may be stated that every provision was made for the prevention of such an accident by the proprietors of the mine, there being a place marked for the corves to come, and sprags placed for the purpose of blocking the wheels. But it would appear that no provision can be made for recklessness or negligence; but an example being made by imprisonment may have more effect than rules, bye-laws, or fines.

### NEW MINING INDUSTRY IN IRELAND.

The mining industries in Ireland have for many years past been in a very unsatisfactory condition, not so much through want of enterprise, or the required capital, but by a combination of circumstances. Formerly a most thriving mining industry was carried on in the county Wicklow, at the copper mines at Ballymurtagh, Ovoca, the property of the Wicklow Copper Mine Company, which have yielded vast quantities of ore, and afforded employment to a large local mining population; but since the introduction of ore from Spain this industry in Wicklow may be said to be—at least for the time being—almost extinct; though it is by no means improbable at some future date they will be again revived. There, however, exists in these mines extensive deposits of iron ore, in the form of yellow ochre; the trade carried on in this mineral is supplied chiefly from mines in England and Wales. Yellow ochre enters largely into the manufacture of paint and the colouring of paper. From the energetic measures that are now being made to open up these ochre deposits in Wicklow it bids fair that in the future Irish ochres will take a prominent position in the market. This ochre is in the form known as rock ochre, similar to that found in the neighbourhood of Oxfordshire. To reduce it to an impalpable powder special machinery of the most improved type is now being erected at the chemical works of the Wicklow Copper Mine Company, at Arklow, which will be capable of preparing for sale about 1000 tons of ochre per annum. It is contemplated erecting machinery for making casks for the requirements of this business, which will effect a considerable saving in cost over manual labour. The prospects of the successful development of these ochre mines has been materially increased by a discovery, which has recently been patented by Mr. JOHN C. STANLEY, of St. Martin's-lane, by which the hitherto valueless mud which accumulates in rivers can be utilised; it is found that so excessively polluted is the River Thames with the sewage of London that the mud contains an amount of nitrogenous matter. In the process of treating the mud a compound is formed by adding a mixture of iron ore; that from the mines of Wicklow has been found to be specially suited for the requirements of this new manufacture. When calcined a brown colouring matter is formed, which is suitable for the purposes of colouring brown paper; the nitrogenous vapours will be collected and converted into ammoniacal compounds. A company is now being formed to acquire this valuable patent, and works will be erected on the banks of the Thames to treat the mud on an extensive scale.

There is little doubt but that there exists in Ireland vast quantities of undeveloped mineral wealth which, if properly opened up, could be worked to considerable profit, every element being in favour of mining in Ireland, where there are ample supplies of water, timber, labour, &c. If but a fractional part of the capital annually invested in the numerous mining projects that are from time to time brought out was but invested in our home industries, either mining or manufactures, the country at large would be benefited instead of enriching foreign countries. Ireland offers to capitalists an opening for the establishment of manufacturing and mining industries, the want of employ-



ment being the primary cause of the various schemes of emigration, the result would be to rapidly deprive the country of its bone and sinew. As success brings success, possibly the opening up of these ochre deposits in Winklow may be the forerunner of an awakened energy to develop mines and manufactures in other parts of the country.

#### OWEN VEAN AND TREGURTHA OR, AS AT DOLCOATH, TRYING FOR TIN UNDER COPPER IN A DISTRICT RICH IN MINERAL.

"The ant within its cavern deep,  
Would bid us labour too,  
And writes upon its tiny heap,  
'There's work enough to do.'"  
—BURBIDGE.

The Cornish miner, the main portion of whose life is spent deep down in the bowels of the earth, has been—oft-times and most appropriately—compared with that particular portion of the ant-tribe who burrow for themselves "caverns deep" in the earth wherein to lay up their stock of summer-collected food for the long months of winter, and also where they comfortably repose from their labours until the warmth of the spring sun gives them warning that they may safely appear again on the surface. Unlike the ants, however, the mineral searcher goes underground to work, and not to sleep; to extract from the soil those metals—coal, iron, copper, tin—without which our homes would be so comfortless and so deficient. Unfortunately, of late years it has been impossible for anyone who has been accustomed to come into our westernmost English county not to be painfully conscious, for many reasons, that the heaps which the miner-ant has thrown up from far below the earth's surface have not by any means borne upon their faces the impression that "there's work enough to do." For these huge piles of iron-stained earth and stone, which we see in every direction as we are whirled along through the country in a fast-speeding train, have, in most instances, been evidently untouched or added to for many years past, and the neighbouring remains of lofty buildings in which the ceaseless throbbing of steam-engines was formerly heard, testify, as they day by day silently crumble into ruin and decay, that work has been suspended, perhaps never to be resumed. It is unnecessary in a mining district such as this in which we live to dilate in any way upon the gradual, though only too sure, diminution in the amount of work which our mining industries formerly afforded to hundreds and thousands of persons, who have since had to seek their livelihoods in foreign lands, or accept the alternative of going into the workhouse; and perhaps in few parishes in the county are there more surface evidences of the work once done by these toilers of the soil than appear to the wayfarer as he travels along past Marazion on the way to Helston or Falmouth.

As one journeys eastward along that road one can but compare in imagination the busy days when the ships of the hardy Phœnicians crowded Mount's Bay, and troops of men were employed in transporting the precious tin from its storehouses on St. Michael's Mount to vessels which were to bear it away far over sea, with the present desolate-looking monuments of departed prosperity and vanished fortunes which greet our eyes in the present day on hill or dale, look where we will: 50 years ago the neighbourhood of Market-jew was ever noisy with the sound of hissing steam, the thumping of stamping machinery, and the rambling of heavily-laden wagons bearing tin ore to the smelting-houses. To-day a depressing silence reigns almost supreme there—at any rate, so far as mining is concerned; and, as one who takes a more than ordinary interest in this western land, it was with infinite satisfaction that, during a casual ramble a few days since, I saw, not far off the main road and near to the village of Goldsithney, a newly-erected engine-house and other works, which on enquiry I found to belong to the recently-started mine of Owen Vean and Tregurtha Downs. Plenty of leisure and an equal amount of curiosity led me to decide on a closer inspection; so, at the risk of a prosecution for trespass, I immediately made a bee-line across fields and over hedges until I found myself in the middle of the mine and among a crowd of busy workers. Accosted by one in authority I was fain to admit that my business on the spot amounted to *nil*, and I could only plead curiosity and the pleasure it gave me, as a frequent visitor to Marazion and the neighbourhood, to see once more springing up amid the many wrecked mines visible in the distance, whichever way one looked, an industry which—it could be seen at the merest glance—was affording occupation to a considerable number of people, and which, as I subsequently discovered, is likely in the future to be a source of livelihood for many more. My knowledge of Cornish courtesy and that innate politeness which seems part and parcel of the general run of Cornishmen, assured me that there would be no fear of my being peremptorily ordered off the property, and I was not mistaken; for the genial and healthy-looking "captain" bade me to "look round as much as I had a mind to," and he added the kindly information that the manager "had gone home to dinner, but was shortly expected back, and would tell me anything and everything I had a mind to ask him." Accepting the permission to look round I wended my way across the yard formed by excellently-lighted and fitted-up smiths' and carpenters' shops, magazines, and storehouse, and passing through a prone forest of "rods" and timber for shaft purposes, reached the substantially-built engine-house, and entered the portals.

All within is clean, neat, and shining; the windows are brightened with thriving geraniums, and the engineer is polishing the bright work, which is glistening like looking-glass in every direction, with a vigour as if his life depended upon this, while he smilingly informs me that the steel fittings are still unfinished, and points out where huge plates of the shining metal are to go by-and-by, meaning more work, more polishing, and more perspiration. In reply to my inquisitiveness Mr. Engineer informs me—his face lighting up with pride—that the engine was always considered "old Capt. Will. Grose's masterpiece," who that possibly departed gentleman may be, or may have been, I wot not. Further, that it was originally constructed for Wheal Alfred, was transferred to Crenver and Wheal Abraham, and came thence to its present habitation.

Coming down to dry facts, I am also informed that this pumping-engine is of 80-in. cylinder, steamed by four Cornish boilers (which weigh upwards of 50 tons), while the pumps—20 in. in diameter—are capable of raising to surface 1600 gallons of water per minute, supposing the engine to go at maximum speed. At present, however, as I ascertain later on, the present inflow of water in the depth of winter barely exceeds 500 gallons per minute, though the mine is already drained to the bottom—55 fms. below the adit, or 66 fms. from the surface—so that about two-thirds of the engine-power still remains for future and deeper working; in other words, it will be possible to sink the shaft to a depth of some 160 or 180 fathoms, and keep it "forked" without any additional engine-power.

Moving into the upper chamber of the engine-house the same perfect state of cleanliness meets one's eye all round; and, after going up another flight of steps, and opening a door, I find myself in the open air, upon one of the two platforms between which the 35-ton bob is almost silently moving up and down, at a speed of about five strokes per minute. A glance around shows one at once how thoroughly well the work of laying out the mine has been planned and carried out, and how compact and convenient everything will be when completed. Difficult it is indeed to imagine that a short 18 months ago not a stone of the building within which one stands, or of the many surrounding edifices, was laid. This one fact bespeaks in itself the energy which has been put forward by the management up to this time, and testifies to the industry and zeal of those who have had the immediate supervision of the work. Especially, one soon finds, is credit due to Mr. W. Derry, the resident mining engineer and pursuer, who has joined me while I have been looking round, and who has, from the first, personally superintended the laying of almost every stone one upon the other.

But, while I have been standing here, and in less time than it takes to pen these words, the thought has struck me as to how wonderfully suited is this spot for the purposes of tin exploration, if there be any logic at all in regard to such matters. Of course, we may take it that tin veins have been formed by great upheavals on the part of Nature, rending the earth asunder; and, in the fissures made, deposits of metal have been left through the action of

fire, or electricity, or water, or by all combined, perhaps. And it is also a known fact that just as a spring, bubbling up in the centre of a pond, throws a gradually enlarging wave away from it, so it is with regard to lodes of tin. The centre of the upheaval is mostly denoted by a hill of varying height, round the foot of which the metal is found to be deposited in a certain direction, and the nearer the mine to the hill the larger and stronger are the courses of tin; while, as the "wave" grows larger, so the courses become thinner, more "bunchy," and, consequently, less productive. Carn Brea Hill, with its surrounding mines of Carn Brea and East Pool on the one side, and the Bassetts on the other, is an example of this; the first-named mines, nestling at its very foot, being marvellously rich; while, as the wave has extended, lodes become less and less productive, until they become "bunchy" and uncertain, as at Killifreth and other mines. So with regard to the mine of which I am at present writing.

Without a doubt St. Michael's Mount marks the centre of a violent upheaval of Nature—perhaps, scores of centuries ago; and following up the same arguments, the mines which are nearer to that centre should be those that are the most productive and most remunerative. Without doubt then Owen Vean and Tregurtha Downs should be full of riches, even on this reasoning alone. But, taking the history of the mine into consideration, the nature of the ground, and the causes for which it was previously stopped, one cannot but come to the conclusion that the present company will not only reap a rich reward for their speculation; and will further have the satisfaction of knowing that, by-and-bye the demand for labour will be increased in the neighbourhood, and thus better times will come to all. My reader (if I get a reader) will naturally have asked before this,—if all this be so, why have not former speculators reaped the fortunes which you now predict? Why is the neighbourhood covered with piles of undisturbed excavation? Why are there so many dilapidated engine-houses to be seen all round, as you have mentioned in the earlier part of this article? Listen to me for a few moments, and I will endeavour to explain why Wheal Virgin, Gwallon, Wheal Fortune, and other mines were stopped, and why it is more than probable that the Marazion district will become a rich tin-bearing one below the shallow copper deposits.

Fifty and odd years ago the old Tregurtha Downs engine ceased work. The price of black tin was then but little over 30 $\frac{1}{2}$  per ton, and it would appear—from the vast quantity of tin stuff left in the backs of the various levels driven from the engine-shaft on the south lode (I am speaking now of this particular mine)—that the pursuit of copper ore was the chief business of the old miners on this particular lode. This is confirmed by an examination of the old workings, which disclose that rich bunches of this mineral have been extracted in places, leaving many thousands of tons of rich tin stuff to be stoped away, which is now equal in value to the average produce from the richest mines in the county—producing about 56 lbs. to the ton. And, basing an opinion upon the general rule which is found to prevail in the county, it is only fair to assume that the lode will increase in productiveness as it goes deeper.

Again; about 40 fms. northward from the working to which I have just referred (and I might here mention that the statement as to the mine being originally worked only for copper has since been corroborated by an aged miner who worked here up to the time of the stoppage), and in a parallel line east and west, runs a large, partially decomposed, stanniferous elvan course, on both sides of which are separate, distinct, and productive lodes, the northern—according to old plans and records which were shown to me—being the premier lode of the property. From one section which I examined closely (through the kindness of Mr. Derry) I found that nearly every particle of that lode appears to have been stoped away for over 100 fms. in length, down to the very bottom of the deepest level, and the agents report that a great course of tin for that length, and having a westerly dip, undoubtedly exists on this lode, and follows down a cross-course which intersects the whole of the lodes at nearly right angles, thus augmenting their productiveness. Shafts and cross-cuts are being sunk and driven for extensively working this lode, both westward and in depth, as soon as the stamps and dressing-floors are ready.

And now for a word or two more as to the present and future machinery and appliances of the mine. The pumping-engine I have described, and I ought to add that since the commencement of work an adit level two miles and more in length has been cleared to carry off the surface water. One of Loam's worm-capstans, with a steel wire-rope, is employed for raising and lowering pitwork and material for underground purposes, by means of a lofty shears, gorgeous in its coating of red paint. The winding machinery consists of a pair of horizontal engines connected with two double-skip-roads, conveniently situated for operating on the mineral lodes in the property. With a view to the treatment of a maximum quantity of tin stuff at a minimum of cost, the directors (of whom Mr. W. Molesworth St. Aubyn, M.P. for Helston, is the worthy Chairman), at the recommendation of their managers and engineers, after a most searching investigation by the latter, and careful comparison of the duty of these with that of the old gravitation kind, have ordered four of Husband's patent pneumatic stamps, which are being manufactured by Messrs. Harvey and Co., of Hayle, who are also making an entirely new engine to drive them. The buildings for these are very nearly completed. It is estimated that this plant will stamp at least 50 tons of tinstone per day, and it is further intended to erect a similar battery as soon as these are in full play. The ground and extensive dressing-floors are being laid out with this in view, while a capacious reservoir, to the east of the engine-house, will afford an ample supply of water for keeping operations going should the pumping-engine at any time be accidentally stopped. At present only a moderate quantity of tin is being raised, on the score of a future advantage, because stamping machinery is needed, and what is now raised has to be taken three miles to a small water-stamp. However, in a couple of months' time the men, women, and boys now working on the mine will be increased from 80 to something like double that number, and I have little doubt but that in a short time, taking into consideration the cheapness with which the stuff can be at present raised, Owen Vean and Tregurtha Downs will figure prominently in the list of dividend-paying mines of the county.

There is little more to add to what has been said; and the main portion of which was roughly jotted down on the spot and hastily threaded together since. It may be added, however, that the length of the company's grant (in the lands of Messrs. Polwhele, Trevelyan, and others) is upwards of a mile on the course of the lodes from east to west, and is of sufficient breadth to embrace other lodes besides those which I have mentioned. Westward the property is bounded by Wheal Virgin (reported to be full of riches in the shape of tin, and which I trust to see also at work ere long) and other well-known mines, which are under grant to Mr. H. R. Lewis, of London (the manager of the mine of which I have written), and Mr. Derry. The company's engineers are Messrs. Loam and Co., of Liskeard.

One more word and I have done. It is evident to the most casual observer that the present company has carried out the work, so far, thoroughly well; and that they intend the mine to be a permanency—indeed, it is difficult to see where failure can take place; that work has also been done expeditiously, and, therefore, economically, for returns will, almost at once, begin to be made, thus causing an immediate money return to defray working expenses and cost of sinking and driving, instead of the too frequent plan of wasting away original capital to the last penny before an attempt is made to try what a mine is really worth. I shall now watch the mine personally, with the greatest interest and with a confident expectation of that future success which I venture to predict.

It only remains for me now to thank Mr. Derry and his agents for their very great kindness during my pleasant couple of hours' chat and inspection of the mine, the only return for which that I can make is in thus sending forth to the public a very crude, but I believe true, description of the new mine of Owen Vean and Tregurtha Downs.

ANDERTON TIN MINE.—The discovery at Anderton Tin Mine is one of those valuable and important discoveries in mining required in these dull days of mining enterprise to infuse new life and energy into honest and honourably conducted mining. The report in another

part of the Journal to-day is, we are informed, very much within the truth; very much better things are almost certain to follow the discovery of a large and rich tin lode, in addition to those features which were before this rich enough to induce the adventurers to erect fine machinery and make large outlays in development.

#### REPORT FROM CORNWALL.

Jan. 24.—It is not easy to exaggerate the state of feeling which prevails in the heart of the Western mining district. It is not simply that there is depression—though, so far as we can see, rarely has depression been so manifest in its results, and no little disposition to make the best that can occasionally be made even out of depressed times. Associated with the depression is a feeling of dissatisfaction—we might fairly say indignation—at the extent to which the present state of things might have been prevented by truly liberal and kindly consideration. We said when the Dolcoath fine was levied that an amount of injury had been done to mining in general which it was impossible to reckon, and which it would take months, if not years, to recover from. Unfortunately this forecast has proved only too true, and at the present moment there is no greater obstacle to the restoration of confidence. The fact is patent to everyone, and it is of no use attempting to disguise it. In any case improvement, therefore, will be a work of time. Under ordinary conditions of depression we might expect that investors would be taking advantage of the miserably low prices at which mines with really good prospects are selling; but the want of confidence prevents this. It has been suggested that mine adventurers generally should make common cause upon the dues question, and point out to the lords that the dues must be relinquished when calls are being made and wages reduced to the lowest point. We do not know what prospect there is of general discontent taking the shape of united action, but some decided step is needed.

Carrying out in one form the idea of more work for the current wages, has led to the consideration as another means of practically attaining the same end, by the extension of the tribute system, which in many mines has certainly been unwisely curtailed. There is, we believe, a strong disposition in some influential quarters to have wide resort to this as one method of meeting the existing pressure; and it certainly has this advantage, that not only is it certain in its application, but it is easily applied. Somehow or other calls will have to be reduced to a minimum, and so far as the actual working of the mines is concerned there is every prospect of steady and efficient co-operation to that end. We hope it will be so in the other quarters concerned.

At length we may congratulate ourselves on the fact that Dolcoath has a perfectly clean bill of legal health, and has seen the end of her Mayne troubles. At a special meeting held on Monday Mr. Rogers's bill was settled on the basis of a compromise arranged by Mr. Marrack, without taxation—a costly and lengthy process—Messrs. Rogers receiving 550 guineas in addition to the 250 $\frac{1}{2}$  already paid, in lieu of all demands. The only objection, it was stated, raised by Mr. Marrack had no reference to Mr. Rogers's own charges, but to the fees of counsel. These were 250 $\frac{1}{2}$ , and it was recommended should be reduced to 100 guineas. It will now, however, be for Mr. Rogers to make the best arrangements he can with the learned gentlemen. Let us hope that Dolcoath has seen the last for many a year of her lately abounding difficulties.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Jan. 24.—The South Staffordshire Coal Trade remains in an unsatisfactory state. House fuel is very flat for the time of the year, and merchants show no inclination to lay in stocks. Furnace coal sells well in the limited area over which best qualities are mined, and good prices are being got for it. But mill and forge coal is in less demand than at date of last report, and the colliers are working short time. Prices for furnace and second-class house coal range from 9s. to 10s., for best mill coal 7s. 6d. to 8s., and for forge from 6s. 6d. to 6s. Best rough slack on the Dudley side of the district is 4s. to 5s. Staffordshire pigs remain tame at 62s. 6d. to 60s. for all-mine. Hematites are 57s. 6d. to 60s., but there are very few sales. Cleveland foundry pigs were quoted to-day in Birmingham at 49s. 6d. per ton delivered, but there were no buyers. The mills and forges are only partially employed except as to best sheets. These latter keep at 10 $\frac{1}{2}$  to 11 $\frac{1}{2}$  for working up purposes. Boiler-plates, 8s. 10s.; best bars, 7 $\frac{1}{2}$  10s. to 7 $\frac{1}{2}$ ; common sorts, 6 $\frac{1}{2}$ .

The colliers employed at Old Hill by Messrs. Swindell and Collis have after a fortnight's strike against the introduction of certain new rules resumed work this week. The firm have agreed to withdraw the new rules, and abide by those which have until lately been in force.

The first of the series of 20 lectures "On the Theory and Practice of Coal Mining and Colliery Management" was delivered at Mason College, Birmingham, on Monday, by Prof. John Brown, C.E., F.G.S. There was a fair attendance of mining students, to whom the lectures will prove very valuable. The lecturer gave an outline of the course he proposed to follow in his subsequent lectures, and referred briefly to the various items in the syllabus.

On Wednesday an inquest was held at Dudley upon the body of George Colwell, aged 21, a miner who had died from injuries received in the Warren's Hall Colliery, Rowley, of the Earl of Dudley, on Nov. 26 last. It was shown that deceased and other miners were going to get some coals down, and deceased knocked upon the face to see if it was safe. But there came a "bump," and the coal fell upon the deceased. He blamed no one. Mr. Pickering, Assistant Government Inspector of Mines, explained that deceased being one of the "doggies" in the pit it was part of his duties to examine the face of coal. A verdict of "Accidental Death" was returned.

In North Staffordshire the Coal Trade, whether for manufacturing or domestic purposes, is tame, and during the past two or three weeks the consumption has been lighter than for some time previous. Although the output has been reduced the production continues more than equal to the requirements of the market now prices tend downwards, although nominally they are unaltered. Ironstone is selling readily, good contracts having been lately entered into, and at prices which are fairly remunerative. Some pig makers have recently booked big orders, mostly for part-mine sorts, and the demand may be characterised upon the whole as a little better. Mine pigs are selling at from 60s. to 55s., and common sorts at from 42s. 6d. to 40s. The manufactured iron trade is in an irregular condition, and orders cannot be reported satisfactory, whether extent or price is considered. Ordinary bars are 6 $\frac{1}{2}$  2s. 6d. to 6 $\frac{1}{2}$  10s., and best descriptions 10s. more.

#### TRADE IN SOUTH WALES.

Jan. 24.—The amount of steam coal shipped at Cardiff last week was the greatest on record in the history of the port, being 163,195 tons foreign, and 21,883 coastwise; Newport sent away 36,506 tons foreign, and 19,142 coastwise; Swansea, 19,313 tons foreign. The house coal trade is very good considering the mildness of the weather. Cardiff sent away last week 4617 tons patent fuel, and Swansea 2665 tons. It is a source of no inconsiderable gratification to be able to announce that the general condition and aspect of the vast coal industry in the Rhondda Valley is at the commencement of the year 1884 in a healthy state as it can well be. The coal trade throughout the valleys during the past year has been exceptionally gratifying and although there have been no sudden leaps and bounds from depression to great prosperity, work has been regular and plentiful, and in consequence of the several advances made during the year by the sliding-scale arrangement, the colliers' wage rate is now a considerable improvement upon that which was paid during the preceding years. Several new collieries have been started, old concerns reopened, and the hopeful outlook of the trade has been such that there has been no lack of enterprise, and no danger that colliery proprietors will be "blinded with the lustre of gold, rushing into Barry pitfalls and morasses." At the Blaenrhondda and Fernhill Collieries, considerable animation prevails, and excepting the couple of days lost during the Christmas holidays, and a couple of days a month before, when the last advance



was declared by the General Association sliding-scale, there has been no lost time owing to any scarcity of orders for a considerable time past. The Danraven and the Rhondda Merthyr Collieries, which are situated in the neighbourhood of Blaenycwm, also show the same signs of activity, and at both the last-named concerns their prospects for the future are bright and encouraging. Coming down to the neighbourhood of Treherbert, the Lady Margaret and Old Bute Collieries are in full swing, the quantity of coal produced there being at the present time very large. The same cheerful remark will apply to the Ynysfelo Colliery, situated at the same place. In the neighbourhood of Treorky, where the Ynyswen, Abergorky, and Tylacoch Collieries are situated, matters are in a very healthy condition. The workings at the Ynyswen Colliery are being opened out with considerable energy, and its newly-acquired proprietor, Mr. W. Jones, of Cefn, deserves a word of commendation for the manner in which he has carried on the concern after the disastrous explosion which occurred, when Mr. S. W. Kelly, the then proprietor, met with his sad death. The Abergorky Colliery also show considerable signs of animation, and the new vein of coal struck at the level some time ago is proving to be of excellent quality. There has been considerable immunity from serious accidents at these large collieries for some time past. At the Tylacoch Colliery a short time was lost lately in consequence of the Christmas holidays, and when work was resumed an accident occurred to the winding engine, which necessitated a cessation of work for a couple of days more. However, since the engine has been repaired operations have proceeded without a hitch, and the colliery, as it is generally known here, is being rapidly improved and opened out by its energetic new owners, Messrs. Thomas and Evans. Going over to Cwmpark, where two of the largest collieries belonging to the Ocean Coal Company are situated, full time is the order of the day. The "black diamond" is produced in enormous quantities. The new pit above Cwmpark is going on as well as can be expected, and it is believed that ere many months have passed a considerable quantity of coal will be brought to bank there. Going down to the Tynybedw and Gelli Collieries in the neighbourhood of Pentre, both of which collieries were lately the property of Messrs. Thomas and Griffiths, have just been acquired by the Messrs. Cory, of Cardiff, considerable animation is observable, and a bright future is predicted, inasmuch as the resources of both collieries are capable of considerable improvement and enlargement. The Pentre and Church Collieries are just now in full employment, and the same encouraging words will apply to the Bodringallt, Ton and Bwlfa Collieries.

The Steel and Iron Trades of the district exhibit no signs of improvement. Newport sent away last week a parcel of 1330 tons to Cape Town, 750 to Bahia, and 157 to Dieppe. Iron ore has been received at Newport to the extent of 12,330 tons, and 1650 from other places; Cardiff received 9848 tons from Bilbao, and 2491 from other places. Prices remain low.

The Tin-Plate Trade is a little better as regards prices. Good IC cokes are quoted at from 15s. 6d. to 15s. 9d. per box, and best charcoal at from 18s. to 19s. The works open are all in active operation.

#### WATSON BROTHERS, MINEOWNERS, STOCK AND SHARE DEALERS, &c 1, ST MICHAEL'S ALLEY, CORNHILL, LONDON

The subject of lords' dues, to which our attention was called last week, is assuming vast importance, and it is quite clear unless a general reduction takes place, to say nothing of remissions of arrears, the gosse that for lords, at least, have so long laid golden eggs, will be destroyed. We may also add that in these days of depression and the difficulty of getting in calls the merchants also must not only charge as little as possible, but give more time, as a rule, for payments.

In Cornwall it is pleasant to see that many lords are assisting the lessees of mines under them, not only in reducing the dues for the future, but in total remissions of arrears, and in this way the name of Lord Robartes stands out conspicuous. This is as it should be, for shareholders without such consideration is shown them, cannot be expected to keep putting their hands in their pockets to work mines that only benefit lords and merchants. And here it should not be lost sight of that if these old mines that do not pay to work at the present price of metals—once stop working, the royalties they now pay will not only cease, but there will be little chance of their ever being worked again.

Thus it is to the interest of the lords themselves to be generous and liberal in such times as these. We have heard of cases of peculiar hardship, where lessees and those working under them have been and are treated with great severity; but they are rare, and happen mostly we suspect when the lords themselves, if appealed to personally might act differently. Certainly they would if they looked to their own interest. The subject altogether is one well worth ventilating, and we shall be glad to receive communications from correspondents upon it in a general way.

The district in which East Blue Hills is situate made large profits before the discovery of West Kitty. Thus from an old plan we find that Blue Hills—close up to the boundary of East Blue Hills—made 37,000l. profit; Penhalls, 35,000l.; Polberro, 30,000l.; Wheal Friendly, 16,000l.; Wheal Kitty, 50,000l. It is on the Penhalls and Blue Hills lode that we have been working so far at East Blue Hills, and selling tin (without machinery) from the commencement. At first we stamped our tin at some borrowed stamps; then we erected 20 heads, and have sold altogether 2798l. worth. We have also done a deal of dead work, particularly in clearing and making a shaft down to the 30, with a view to getting under the workings from which we raised the above-named tin, and are still raising fair quantities. Our expenditure on this, including whins, stamps, &c., has been 2700l. All this has been on the old lode. We have also cleared Gompas's adit for a long distance towards the West Kitty lode, and may some day cut it at a good depth. And because we have been asked so many times about this lode we requested the purser to have it surveyed and dished, and the general result we gave last week. We have since received a plan of the district, showing the run of the West Kitty lode into and through the southern part of East Blue Hills, and as the lode underlies north 6 ft. in a fathom, the deeper we go the more it will be East Blue Hills sett. The size of the latter is many times larger than West Kitty, and few young mines have done better, for we have, as shown, sold tin to the value of 2798l., have done and shall do without any call since the commencement, and should have made a good profit but for the failure of the water for the stamps during the summer months, and the sinking of the shaft, which was considered prudent and necessary to get under the present deposits of tin, which have from first to last been very productive. Large quantities were taken away above the 30, or deep adit. The plan of the district referred to, and sent up by the purser, may be seen by any shareholder here or at the offices of the company; also a sketch showing the extent of the ground taken away.

We know of no reason for the fall in Crebor shares beyond the price of copper, and the general dullness of the market. Writing to the offices of the company under date the 18th inst., the purser says "We shall sample next week somewhat over 400 tons, and we expect it will be a little better quality than the last. In talking with the agent to-day and reviewing the past year, we consider our position underground is better than it was this day twelvemonth; the discovery of ore in the bottom of the mine to west of new shaft is a most important thing for us, as it looks quite like making a long course of ore."

The 102 west at Prince of Wales is worth 2 tons of copper ore per fathom, and 8l. per fathom for tin; the 90 west 1½ ton of copper and 5l. per fathom for tin. The extra stamps went to work on Monday.

The lode in the 122 east at Polberro is 3 ft. wide, composed of peach, spar, and a little mandic, with tin disseminated throughout it; it is, the agent says, a very compact lode, with two regular walls, and looks promising for an early improvement.

Business continues to be very quiet on the Stock Exchange, but

markets generally are steady and prices show no great changes. In the foreign market Egyptians are firmer, the dispatch of General Gordon having a re-assuring effect. Peruvians are dull and lower on the prospect of further litigation restricting the distribution of the funds now in hand; the Five per Cent. Loan is only about 8½. Spanish stocks have been in demand at higher figures. The dividends already announced on some of the English railways are satisfactory, and, with the exception of that of the Great Eastern, up to general expectation; the Great Eastern was very disappointing, being at the rate of only 2½ per cent. per annum, compared with 3½ per cent. for the corresponding period of last year, giving 1½ per cent. for the whole year, against 2 per cent. in 1882. The company is about to issue a large amount of new capital. Grand Trunk and Mexican Railway stocks are better, the traffic returns showing smaller decrease than expected. Anglo-American Telegraph stocks and British Electric Light shares are lower. The English Funds steady.

**GOLD COAST MINING COMPANY.**—The following is a copy of a letter received from Mr. Haughton, the engineer who was sent out by the directors of the Gold Coast Mining Company (Limited) to report on their property. It will be followed by a full report, and, it may be added, that the letter which appeared from Mr. Gowans some time ago on the general prospects and condition of the mine has been handed to Mr. Haughton, who has been instructed to go through it in detail, on behalf of the shareholders, and report upon it:—

Abontuyakoon, West Coast Africa, Dec. 18: For the information of the board of directors, I advise you of my arrival at Axim on the 5th—all safe. Mr. Gowans' gig arrived on the 11th to convey me to Inframangy, at which place I arrived on the 12th, and was met by Mr. Gowans. We remained at the latter place the following day, looking round, and left for Bonah on the 14th, arriving here on the 15th (Sunday). I may state that I am very favourably impressed with the mine, what little I have seen of it so far, and that Mr. Gowans is deserving of great credit for what he has accomplished, not only for the manner in which he has developed the mine, but also for the erection of the machinery in the face of the great difficulties he has had to contend with by overland transportation, and the want of practical mechanical labour. I am astonished that he has succeeded in accomplishing so much without the aid of a single mechanic that ever saw a quartz crushing battery until he went out there; and even now it necessitates his being continually at the mill, for, if anything goes wrong, he has no one with him that knows anything about it. In all probability you will receive my cable before this. I am sorry to say that I have a slight attack of fever to-day, but I hope to get rid of it quickly, so as to be able to get through the mine and report by cable next steamer.—THOS. J. HAUGHTON.

Since receipt of the above a telegram has been received from Mr. Haughton, sent after his fuller examination of the mine. It states that the property is very valuable, and may, with a small additional outlay to improve the machinery, with which Mr. Haughton is not quite satisfied, be made to pay well. Mr. Haughton's detailed report will appear in due course.

**GOLD MINING IN BRAZIL—IMPORTANT TO INVESTORS.**—We understand that in the course of the next few days a new company of unusual promise will be introduced to the public, which is very influentially supported in both London and Paris. It has been formed to work a group of four mines in one of the richest districts of Brazil, the great value of which has already been proved by explorations extending over three years. The mines are stated to be in full working order, with large ore reserves. A strong board has been formed, and the names of the London managers, when announced, will be certain to inspire confidence in all those acquainted with the numerous mines which they have conducted to a successful issue.

**POTOSI GOLD.**—In an explanatory circular issued with the notice of the forthcoming meeting for reconstruction of the concern it is stated that in the old company the capital is—Ordinary shares, 349,000l., at 1l. each, 349,000l.; founders' shares, 1000, representing nominally 1000l. (these will, owing to this reconstruction, be extinguished); first mortgage debentures, 50,000l.; second mortgage debentures, 20,000l.; third mortgage, 1425l. = 421,425l. The new company, capital of 300,000 shares of 1l. each, will consist of 70,000l. 10 per cent. preference shares, fully-paid, and 230,000l. ordinary shares, to be apportioned thus—50,000 10 per cent. preference shares, in lieu of first mortgage debentures, with option of conversion into ordinary shares, 50,000l.; 30,000 ordinary shares, fully-paid-up, to be given as bonus for first mortgage debentures, 30,000l.; 20,000 10 per cent. preference shares, in lieu of second mortgage debentures, with option of conversion into ordinary shares, 20,000l.; 20,000 ordinary shares, fully-paid-up, in payment of 1425l. third mortgage and 25,000l. open loan, 20,000l. = 120,000l. Then 87,250 ordinary shares, fully-paid-up, and 87,250 ordinary shares, with 10s. paid, representing 130,875l., will be given in exchange for shares of the old company, by the allotment of one new share of 1l., fully-paid, together with one new share with 10s. credited, for every four 1l. shares of the old company. The 10s. per share to be payable, 2s. on allotment, and by 1s. calls as required, giving an available working capital of 43,625l. The balance of 5500 shares is to be held in reserve.

**THE ORGANOS GOLD MINES (Limited).**—As will be seen by the report in another column, the last month's return of the mine showed a profit of 1017l. or 214l., this being at the rate of about 10 per cent. per annum upon the capital of the company. The mine is opening well, and in private letters which have been received it is stated that the Socorro lode "is looking exceedingly promising, and as far as it is in anyone's power to judge there is a fine mine here." "We are good for 10,000l. a-year at least. It has paid double what has been spent upon it from the first, and will do better." The total returns of the mine so far have been 1432 tons of quartz, producing 802 ozs. of gold, or an average of 11½ dwts. per ton. Such a rate as this it is understood will pay a gold mine exceedingly well, but in this case it should be remembered that a large quantity of the quartz has been taken from a part of the mine which had broken in, and was consequently much poorer than would otherwise be the case. In ordinary working the returns show that an average of over an ounce per ton may be looked for.

From Mr. JOHN B. REYNOLDS:—Complaints are very general in all trades that great quietude prevails. Every branch of business shows an absence of animation, and probably the tin market is favourable in comparison with other markets. That more is said about the depression here is natural, owing to the large number of shareholders throughout the country who are interested in our tin mines. What we may look for is a steady improvement in business generally, and we shall all be the safer if we keep clear of the opinions of various interested individuals, and confine ourselves strictly to the facts as they from time to time present themselves. It cannot be too strongly urged that seasons of depression are periodical, and that, as surely as they come, they will pass away. It is most encouraging to notice the prospects of some of our leading mines. Dolcoath never looked richer than it does at present, and, consequently, it was never so well able to bear a comparatively low price for its produce. We should suppose that within the last four months the intrinsic worth of West Kitty must have well-nigh doubled.

At West Polbreen there is an important improvement in the 40 fm. level, or so it is rumoured, and most likely before this is in print the official notification of it will have reached the office. Carn Brea is looked upon as a good speculation, and a high appreciation is expressed of the manner in which the shareholders acted at their last meeting. No sympathy whatever is felt with those who denounce the managers for what in the past we consider to have been a mistaken policy. The fault is not so much with the managers as with the shareholders themselves for not having provided the managers with sufficient funds to carry on the business legitimately. The managers of unforluned mines never stood so high as they do at the present moment, yet unfortunately the same cannot be said of one or two other officials. It is, however, only fair to remember that in depressed times it is the rule for officials to go down in public estimation, and errors of judgment are greatly magnified.

**SCOTCH PIG-IRON.**—Mr. E. W. Crawley, warrant broker, of Leeds, has just issued the second annual edition of his Scotch Pig-Iron statistics for the past 31 years. The tables are neatly arranged in a little volume 5 in. by 2½ in., and will be of great utility to speculators in iron warrants.

**GOLD AND SILVER.**—Messrs. FIKLEY and ABELL (Jan. 24) write:—Further withdrawals of gold from the Bank have taken place, the arrivals having been very small, and quite inadequate to supply the orders which have been received. The total taken out is 250,000l., and consists chiefly of bars, for Spain. We have received 45,500l. from Australia. Silver declined to 50½d. for a day or two after our last, but as the Indian Exchanges improved, and a better demand for money in the East was experienced, a recovery to the former rate of 50½d. took place, and at this quotation the market may be considered firm. The City of Chile has brought 40,000l. from New York, and the Copacapi 25,270l. from Chile. The P. and O. steamer does not leave until Saturday; we are, therefore, unable to state the amount of silver going to India by it. The quotations for bullion are:—Bar gold, fine, 77s. 9d. per ounce standard bar gold, containing 20 dwts. silver, 77s. 10½d.; Spanish doubloons, 72s. 8½d. to 73s. 10d.; South American doubloons, 72s. 8½d.; United States gold coin, 76s. 3½d.; bar silver, fine, 50½d. firm; bar silver, containing 5 grs. gold, 15½d.; cake silver, 54½d.; Mexican dollars, 40½d.; quicksilver, 5l. 8s. Discount 5 per cent.

#### FOREIGN MINES.

**ALAMILLOS.**—Jan. 16: The lode in the 65, driving west of San Felipe's shaft, is 3 ft. wide, but is without lead. In the 55, driving in the same direction, the lode produces good stones of lead ore. The lode in the 85, driving east of San Felipe's shaft, has improved in appearance. In the 130, driving east of Taylor's engine shaft, the lode is somewhat easier for working, and contains spots of lead. The lode in the 130, driving west of Taylor's engine shaft, is unproductive. In the 115, driving west of Taylor's engine shaft, the lode became poor in the past week. The lode in the 80, driving east of San Victor's shaft, is less productive than it was when last reported; its present value being 1½ ton in a fathom. In the 70, driving west of San Victor's shaft, the lode is wider but contains no lead. The lode in the 70, driving west of Judd's shaft is small and unproductive. In Rocas mine, sinking below the 50, the lode has declined in value to 1 ton per fathom. In Cantero's mine, sinking below the 50, stones of lead are found in the lode. Serafin's mine, sinking below the 50 is being sunk east of Judd's shaft, its present worth is 1½ ton of ore per fathom.

**ALMADA AND TIRITO CONSOLIDATED SILVER.**—Richard Harris, Dec. 22: The slope in back of the 40 ft. drift 10' 8 in. were stopped at \$5 per ton. The paystreak is 2 ft. wide, producing 8 tons per lineal foot. The slope in back of the 40 ft. drift is more dreary than when last reported on. The paystreak is 2 ft. wide, yielding 16 tons per lineal fathom; the paystreak in back of the 12 ft. level is yielding 16 tons per lineal fathom; the paystreak is 4 ft. wide. In No. 3 mine, below No. 45 drift, 6' 6 in. were sunk at \$12 per ton. The bottom is in 3 ft. of ore, and yielding 12 tons per fathom. No. 1 mine, below the 12, was sunk 5' 8 in., at \$15 per foot; the bottom shows 3 ft. of ore, yielding 12 tons per fm. No. 2 mine, below the 12, was sunk 8' 6 in.; the paystreak in the bottom is 2 ft. wide, yielding 8 tons per fathom. In the 12 we have now an ore length of 140 ft.; the north breast shows 5 ft. of solid ore, and presents a finer appearance than anything we have yet seen since the discovery of this lode; this end is now yielding 24 tons of good milling ore per cubic fathom; in the drive during the fortnight was 12 ft., at \$11 per ft. In sinking the mine in San Jose we struck old workings, and after removing the debris we encountered two winzes almost vertical; by this discovery we have gained about 58 ft. in depth, or the equivalent of ten weeks' working. We expect to communicate with San Juan workings in a few days. This communication will be of great importance for ventilating the Mina Grande and exploring for pillars upwards. W. A. Clemes Assay from Dec. 11 to Dec. 22: The general assay from the Rand mine has assayed 31.5, 35.2, 40.3, 46.7, and 42.3 ozs. per American ton. Samples from the slope below Guayas drift and from rise in back of same, 28.3 ozs. per American ton. Green ore from bottom winze in San Jose, 116.7 ozs. per American ton.

**CALIFORNIA GOLD.**—Mr. Alfred Rickard, Dec. 22: The 1500 ft. level east is in 104 ft.; the drift has entered disordered ground, consisting chiefly of loose pebbles, and it will be necessary to open out on the footwall of the lode in order to ascertain the course of the pay. The slopes of this level continue to yield 5 tons of ore per fathom. The 1500 west is in 85 ft.; the lode carries 2½ ft. of fair grade milling ore, valued at 6 tons per fathom. The slopes of this level are in pay of the same nature as the drift. The 1400 east is in 380 ft. and has been suspended. From the slopes of this level an output of about 5 tons of milling ore and ½ ton of smelting ore per fathom is being obtained. The 1400 west is in 322 ft.; the lode in the slopes is 1½ ft. wide, yielding fair grade mineral. The 1300 winze west is down 28 ft., and is opening out fairly good stopping ground. The 500 cross-cut is in 21 ft.

—Mr. Rickard telegraphed the directors on the 24th inst., as follows:—Mill run, 500 tons; yield, \$5500 (11000).

**COLORADO UNITED.**—Mr. Macrae, Jan. 5: The 13th level is now carrying a nice-looking crevice rock, and about 3 in. of ore in the bottom of the drift; for the past 3 or 4 ft. there has been but little mineral in the breast of the drift, but there is a new splice of ore coming in 1 to 1½ in. in width, and of good-looking quality. We are now stopping west from No. 1 winze, and have had to go through some barren ground before reaching the mineral. Near the work we shall start a slope on this ore, and will doubtless whip more cobbed ore than we have had this week, as the streak is now beginning to come in. The party in the lower workings of the Penton have a nice streak going both east and west, and have this week shipped 117 sacks of ore, of which 35 sacks are 1st class, 65 sacks 2nd class, and the balance screenings. The rest of the tributaries' pitches are looking about the same. The mill was started on Monday last, but it has not been running long. The water is scarce for the screens and jigs, and will consequently not jig the mineral properly, as the water is not sufficient to carry off the poor rock. Ore shipments for the past week are as follows:—49 sacks cobbed ore, weighing 2 tons 745 lbs.; 43 sacks lead headings, weighing 2 tons 530 lbs.; 73 sacks zinc headings, weighing 3 tons 980 lbs.; and 11 sacks screenings, 925 lbs.—176 sacks, weighing 8 tons 1180 lbs.

**DENVER GOLD.**—Frank S. Craven, Jan. 1: In the 800 west (north vein) the drift is 147 ft. east from cross-cut. The drift has been poor for the past week; it now carries 1 ft. pay. The 33 ft. of slopes carry 2½ ft. of pay on the average, and 43 tons milled last week yielded 19 oz. gold. Returns on about 20 tons of smelting ore should be received this week. The cross-cut for this vein from the 900 back slopes is in 53½ ft. The 900 west drift is in 856 ft. from shaft. A crevice in drift and 9 ft. slope over it will average 14 in. of pay. We are now raising on 18 in. pay for another slope. The 34 tons mill ore last week yielded 14 ozs. gold, or 2½ ozs. per ton; 13,857 lbs. (dry weight) of smelting ore sold at \$34.60 per ton for \$2391.22. In the 1275 west the ground continues as last week; 41 tons mill ore last week yielded 25 ozs. gold, or over ½ oz. per ton. The 1330 west slopes continue fairly good. The 1350 west drift is in 257 ft. from shaft, and now carries 18 in. of low grade ore. None of this has yet been milled. All the company's milled ore last week amounted to 113 tons, and yielded 58½ ozs. gold, or ½ oz. per ton. The smelting ore sales amounted to \$239.22, and we milled 6 cords of custom ore at \$17=\$102.

**DEVALA MOYAR GOLD.**—Manager, Dec. 31: We have not been able to do much work this week owing to the holidays. The drive south from Strathern run now in 60 ft. We have driven out of the reef, but I intend to cross-cut in about a fortnight and see what the reef is like, and how it looks. The reef shall cross-cut will be under the old workings. Balomun reef continues from 6 to 8 ft. wide, and contains a fair show of gold, but I don't think the quartz will yield equal to the assays. We have a considerable amount of ground open, and I am going to take 50 to 100 tons from different places and pass it through the mill. The tunnel is going on well, the contractors having driven 27 ft. during the week. The progress at Harewood tunnel is slow, but with more assistance we shall push it on faster.

—S. Craven, Jan. 2: 500 West, North Vein: The drift is in 156 ft. east from cross-cut; it is poor; 33 ft. of slopes carry 3 ft. of pay on the average; 44 tons milled last week yielded 17½ ozs. gold, or 2-5th ozs. per ton; 58,721 lbs. smelting ore sold, at \$42 per ton, for \$1253.61. The cross-cut for this vein from the 900 west back slopes is in 62 ft. The rock has changed for the better, and emits much water. We are expecting to strike the vein at any time.—900 West: The drift is in 369 ft. from shaft; it has greatly improved, and carries 15 in. of pay, most of which is smelting ore. The raised slopes behind drift are now up 14 ft. It now carries 1 ft. of fine pay on the average; 53 tons milled last week yielded 28 ozs. gold, or ½ oz. per ton.—1275 West: The lowest slope is poorer; 15 ft. of slopes above this average 2½ ft. wide of good mill ore; 27 tons last week milled 15½ ozs. gold, or over ½ oz. per ton. The 1350 west slopes continue fairly good. The 1350 west drift is in 263 ft. from shaft, and now carries a low-grade crevice 3 ft. wide; it is very wet, and promises well. We milled last week 148 tons of mill ore, which yielded 72½ ozs. gold. Also we got 6 ozs. gold from mill scrapings. Total gold, 78½ ozs. We milled six cords custom ore for \$102. We sold 61,269 lbs. smelting ore, at \$43.31 per ton, for \$1323.88.

**EBERHARDT.**—P. Drake, Dec. 29: Drift No. 1 from 6000 west has advanced 7 ft., making the total length 7½ ft. Raise No. 2 advanced 8 ft., making total height 187 ft. There has been no particular change in the workings.

—Jan. 5: Drift No. 1 from 6000 west has advanced 7 ft., making the total length 7½ ft. Raise No. 2 advanced 7 ft., making the total height 194 ft. In the No. 1 drift the rock is hard, with a small seam of ledge matter lying along the wall. In this ledge matter we see ore, very light. We hope to meet with a change very soon. The upraise is mostly spar, with some quartz. The work continues to show strong and regular. The work along side of No. 1 drift is looking about the same. We find bunches of ore that assay well. Ore samples taken from this working Dec. 29 assays \$151.73; Dec. 21, \$141.97; Dec. 24, \$122; Dec. 29, \$154. Thus you can see that it is of good grade, only wanting in amount. I shall continue working along this drift as long as we find these bunches of good ore.

**ENGLISH-AUSTRALIAN GOLD.**—Mark Pollard, Fryerstown, Dec. 15: Since my last report we have cleaned up from the tributaries working back of 320 ft. 100 tons of ore, 13 dwts. of ore, 13 dwts. of ore, 13 dwts. of ore; this is from five weeks' work. They are taking out another crushing; if it is not better than the last I think they will give it up, as they have been working six months for a very little money. The tributaries at the 140 ft. level have a lot met with any stone in the rise, still very good ground each side of the cross-heads; they are also breaking out stone from the leaders on the eastern side of the level, and north of the cross-cut, but have not seen any gold in breaking the stone; the cross-head has changed the country going north of the cross-cut; the ground is harder, and stone very small just now. We shall clean up from the tributaries working at the 70 ft. level this week, they will have 62 tons of ore, but I think it is very poor by the look of it. They have three leaders, making about 3½ ft. of stone altogether; from the bottom to the top leader is 1½ ft. as they have a large quantity of stuff to shift to work the three leaders. The contractors are making very low progress with the cross-cut at the 420 ft. level; they have very hard sandstone, with small bars of slate from 2 to 6 in. in thickness; sandstone bars 2 ft. thick, and very close country; they have been looking for an increase of price per foot; we have not consented to give them any more as yet until we see a kind of ground there will be in the face by the end of the month.

**FORTUNA.**—Jan. 15: Canada Inco's Mine: In the 70, driving west of San Pedro's shaft, the lode has been cut off by a strong cross-course. The lode in the 80, driving in the same direction, is large and open, consisting chiefly of calcareous spar and lead ore; valued at ½ ton per fathom. In the 120, driving east of O'Brien's engine shaft, the lode is a little easier for driving than it was. The lode in the 130, driving east of Lowndes's shaft, has improved to ½ ton per fathom, and the granite is softer than it was. Maria's winze, sinking below the 70, is holed to the 80; its present worth is ½ ton per fathom.—Los Salidos Mine: In the 175, driving west of Taylor's engine shaft, the lode is small and poor and the granite hard. The lode in the 175, driving east of Taylor's engine shaft, is not yet free from the influence of the cross-course. The lode in the 160, driving east of Taylor's engine shaft, is strong and promising, yielding 1 ton per fathom. In the 145, driving east of Taylor's engine shaft, a splendid lode is being laid open, worth 3½ tons per fathom. The lode in the 130, driving in the same direction, has declined to ¾ ton per fathom in the past week. In Virginia's mine, sinking below the 145, the men are making good progress in this hard and wet winze. The lode in Bellido's winze, sinking below the 135, has improved, yielding ¾ ton per fathom. In the 20, driving east of Treasore's engine shaft, a great length of lode is being laid open at a cheap rate, producing ¾ ton per fathom. The 20, driving west of Treasore's engine shaft, is passing through a piece of sterile lode, but there is good ore ground ahead in the upper level. The usual quantity of ore was remitted to the Fortuna Smelting Works during the past month, and the slopes are producing moderately at present. The surface







The Railways of the Company are under Special Subsidy from the Secretary of State for India in Council as hereinafter mentioned.

## ASSAM RAILWAYS AND TRADING COMPANY (LIMITED).

Incorporated under the Companies Acts.

CAPITAL £350,000, IN 35,000 PREFERRED SHARES OF £10 each (fully paid) and £43,750 in DEFERRED SHARES OF £1 each.

### DIRECTORS.

J. S. FORBES, Esq., Chairman London, Chatham, and Dover Railway, CHAIRMAN.

P. C. LECKIE, Esq., Messrs. Durant and Co., Deputy-Chairman.

THOMAS BARNES, Esq., Director Lancashire and Yorkshire Railway.

EVAN A. JACK, Esq., late of Calcutta.

CHARLES SANDERSON, Esq., Director of the Eastern Bengal Railway, and formerly Solicitor to the Government of India, at Calcutta.

J. BERRY WHITE, Esq., Chairman Jukai (Assam) Tea Company, late of Assam.

BANKERS—THE AGRA BANK (LIMITED), 35, Nicholas Lane, E.C.

### SOLICITORS.

Messrs. R. S. TAYLOR, SON, and HUMBERT, 4, Field Court, Gray's Inn, W.C.

### ENGINEER.

BENJAMIN PIERCEY, Esq., M.I.C.E., 8, Drapers' Gardens, E.C. OFFICE—1, TOKENHOUSE BUILDINGS, LOTHBURY, LONDON, E.C.

Issue of £250,000 Six per Cent. Debentures of £100 each (interest payable 1st January and 1st July in each year), of which £19,400 are reserved for conversion by the holders of a like amount of Debentures already issued.

The debentures are secured by a mortgage, and are a first charge on the railways with their rolling stock and plant (including the subsidy of the Secretary of State for India in Council), the flotilla of river steamers, &c., and the collieries and other valuable concessions of the company, but subject to any unconverted portion of the £19,400 debentures already issued, which are secured by mortgage on the railways and subsidy only.

### PROSPECTUS.

The Assam Railways and Trading Company (Limited) was formed in 1881 for the purpose of carrying out certain concessions for the numerous tea plantations, and connecting the River Brahmaputra construction, under a subsidy from the Secretary of State for India in Council, of railways in Assam, about 79 miles in length, traversing the with Talup and the rich coal district of Makum, and for other purposes, amongst which is the establishment of a service of steamers and lighters upon the River Brahmaputra.

The railway concessions are in perpetuity, the Government having, however, the option of purchasing the railway and rolling stock and other equipments at the expiration of the first five years from the date of opening the main line and branch, and at the end of every subsequent period of five years, paying the company 20 per cent. in excess of its value as a dividend-paying investment.

By the same concessions a subsidy is given by the Secretary of State for India in Council for 20 years from the opening of the railway and branch line, respectively, of an amount not exceeding in the whole 100,000 rupees per annum, viz.:—80,000 rupees in respect of the main line to Talup, and 20,000 rupees in respect of the branch to Makum.

In the event of the net earnings yielding a return of 5 per cent. per annum upon the cost of construction the Government subsidy will not come into operation; should the net earnings not give a minimum return of 5 per cent. per annum, the Government subsidy will then be available to an extent not exceeding in the whole 100,000 rupees per annum. Upon the opening of any section of the railway the Government subsidy accrues in respect thereof *pro rata*.

The option of purchase applies to the railway only and not to the other property of the company.

Of the main line 39 miles from the Brahmaputra river to Makum junction were opened for public traffic on the 16th July, 1883, and the Government subsidy has accrued since that date in respect thereof. The remainder of the main line was opened for goods traffic in September last, and will shortly be completed for passenger traffic. The Makum branch is completed for the carriage of coal and merchandise, and will be opened for passenger traffic in March next.

A Government departmental report recently issued, referring to Makum coal fields, states that "these coal measures in thickness and quality of coal are among the first in the world, and are practically inexhaustible;" and the mining engineer of the company in his report made in November last to the Indian Government, at their request, estimates the quantity at 120,000,000 tons above the natural drainage and easily workable. The present price of coal at Dibrugarh and other coaling stations on the Brahmaputra river is from 35s. to 40s. per ton. The company will be able to deliver their coal at these stations at a price well within these figures, and realise a considerable profit per ton.

With the present limited facilities 2000 tons of coal can be raised weekly; an estimated profit of 10s. per ton on this moderate output would yield £50,000 per annum, which independently of other sources of profit is more than three times the amount of interest on these debentures.

The debentures are repayable 1st January, 1904, but the company retains the option of repayment on 1st January, 1889, or on the 1st January in any subsequent year, upon giving six months' notice to the holders thereof.

Issue price, par—payable as follows:—

£5 per cent. on Application.	
25	" " Allotment.
20	" " March 15th, 1884.
50	" " April 15th, 1884.

£100

Non-payment of instalments at dates on which they fall due renders all previous payments liable to forfeiture. Scrip certificates to bearer will be issued in exchange for bankers' receipts and letters of allotment.

The coupon payable 1st July, 1884, will be for £1 15s. This and future half-yearly coupons will be payable at the company's bankers. Payments in full may be made on allotment, or on the 15th March, 1884, under discount at the rate of £4 per cent. per annum.

The debenture will be issued payable to bearer, but can at any time be registered at the option of the holders.

Copies of the concessions, together with the Memorandum and Articles of Association of the company, and the mortgage deed, can be seen at the offices of the company, and of the solicitors, Messrs. R. S. Taylor, Son, and Humbert, 4, Field-court, Gray's Inn, W.C.

Applications for the above debentures must be made upon the annexed form to the bankers of the company, the Agra Bank (Limited), 35, Nicholas-lane, London, E.C.

The LIST OF APPLICATIONS WILL CLOSE on or before TUESDAY, the 29th instant.

Copies of this prospectus, with form of application, may be obtained from the Secretary at the offices of the company, 1, Tokenhouse Buildings, London, E.C.; or of Messrs. Laurie, Milbank, and Co., 22, Threadneedle-street, London, E.C. London, 23rd January, 1884.

### FORM OF APPLICATION.

THE ASSAM RAILWAYS AND TRADING COMPANY (Limited). Issue of £250,000 Six per Cent. Debentures.

To the Directors of the Assam Railways and Trading Company. Having paid on your account to the Agra Bank (Limited), the sum of £ being a deposit of 5 per cent. on £ debentures of your company, hereby request that you will allot £ debentures, and agree to accept the same, or any less amount that may be allotted to and to pay for the same on the terms and conditions of your prospectus.

Signature .....

Name in full .....

Description .....

Date of application... Address .....

**WHEATLEY KIRK, PRICE, AND GOULTY WILL SELL, BY PUBLIC AUCTION (along with some valuable MACHINERY, PLANT, AND EFFECTS), on Wednesday, February 6th, 1884, at Lythgoe's-lane Engine Works, Lythgoe's-lane, Warrington, SEVENTEEN BURLEIGH PATENT ROCK DRILLS, Some quite new, others having been used a short time, together with sundry LOOSE TOOLS AND APPLIANCES used in connection with the same. Particulars in Catalogues, which may be obtained from the Auctioneers, Albert Chambers, Albert-square, Manchester; and 52, Queen Victoria-street, London, E.C.**

**FOR SALE, the LLANHILLETH COLLIERY, the property of HENRY POWELL, Esq., situated on the Western Valley Branch of the Great Western Railway.**

The situation of this property is in one of the best positions in Monmouthshire, within 13 miles of Newport, the port of shipment, and commands a large area of minerals, both the Bituminous and the Steam Coal Measures. The colliery is now in full work on the House Coal Measures.

There is also a pit sunk about 80 yards, fitted with very powerful pumping and winding engines and gear, suitable for winning and working the Steam Coal, a very large area of which, although not already taken, can be secured on very favourable terms.

For full particulars, apply to Messrs. BROWN and ADAMS, Guildhall Chambers, Cardiff; and to view the Colliery, to Mr. JEREMIAH, Llanhilleth Colliery, Crumlin, near Newport, Monmouthshire.

**ON SALE (CHEAP), TO CLEAR THE GROUND, GARSWOOD PARK AND LAFFAR-GARSWOOD COLLIERIES, ST. HELENS, LANCASHIRE.**

**THE ABOVE COLLIERIES, belonging to Messrs. David Bromilow and Co., being worked out, the WHOLE OF THE PLANT IS NOW OFFERED FOR SALE, BY PRIVATE TREATY, and consists of—ONE SINGLE HORIZONTAL WINDING ENGINE, 30 in. cylinder, Cornish valves, 5 ft. 8 in. stroke, and 12 ft. drum for round ropes, and steam brake, by Robinson and Cook.**

**HORIZONTAL ENGINE, 24 in. cylinder, piston valve, 4 ft. stroke, 16 ft. fly-wheel, spur wheels for pumping, 3 to 1 pumping wheel, 14 ft. diameter, disc slide, rod, and L leg, by Coups Brothers.**

**HORIZONTAL ENGINE, 18 in. cylinder, slide valve 4 ft. stroke, 12 ft. fly-wheel, spur wheel 9 in. on face, single pumping crank 10 in. square, 4 ft. stroke, slide rod, L leg.**

**HORIZONTAL ENGINE, 14 in. cylinder, slide valve 24 in. stroke, fly wheel, 9 ft. spur wheel and drum.**

**ONE PAIR HORIZONTAL WINDING ENGINES, 21 in. cylinders, 4 ft. stroke, slide valves, with 9 ft. drum for round ropes.**

**Also, BOILERS, and several other SMALL ENGINES, LOCOMOTIVE, MACHINERY, LATHES, PLANING and DRILLING MACHINES, TURNING and FITTING TOOLS, several large and small SAW BENCHES, THREE HUNDRED AND FORTY 6 and 8 ton WAGONS, NINETEEN RIVER FLATS (rigged), and about 2500 tons of good CANNEL, &c., &c.**

For catalogues and further particulars, apply to D. Bromilow and Co., Garswood Park Colliery, St. Helens, Lancashire.

**COPPER WORKS TO BE SOLD (a going concern) at Mostyn, on banks of the Dee. A valuable Copper Works for the Extraction of Copper and Silver by the wet process. In addition to the reduction of copper, both iron and silver are recovered.**

The works contain eight calcining furnaces heated by gas, condensing towers for hydro-chloric acid, crushing mill, pumping engines, &c., 35 copper precipitating and silver deposit tanks, a refinery for smelting copper, siding to railway, collieries adjoining the works, ample room for extending, and an almost unlimited space for the deposit of waste.

For particulars, apply, by letter, to the EYTON COPPER WORKS, Mostyn, N.W.

### TO INVESTORS IN MINES.

**THE UNDERSIGNED IS OPEN TO ENGAGEMENTS TO MAKE INDEPENDENT EXAMINATIONS AND REPORTS on Mining Properties in any part of the United States and Territories, in any of the States of Mexico, or in the British Colonies of Australia and New Zealand.**

For references, see advertisement in this Journal; and for terms inspect list which has been sent to the MINING JOURNAL Office; or address by cable or letter, JOHN ROBERTSON, F.S.A., Mining and Consulting Engineer, Las Vegas, New Mexico, U.S.A.

### FOR SALE.

**TO COLLIERY AND QUARRY PROPRIETORS. FOR SALE, PATENT IRON TIPPLER AND IRON TRUCKS, nearly new, being found unsuitable for the purposes required. No reasonable offer refused.**

Apply, by letter only, to "Q. T. X." Messrs. Hepburn's, 7, Pancras-lane, London, E.C.

### PIT SINKING, WINDING COAL, PUMPING, &c.

**PORTABLE STEAM ENGINE FOR SALE, with two 9½ inch cylinders, and link motion reversing gear also gear to wind and pump.**

**A 9 H.P. VERTICAL STEAM ENGINE, with link motion reversing gear (winding drum if required). VERY CHEAP.**

**A 6 ft. pan MORTAR MILL, VERTICAL ENGINE, and BOILER combined, on carriage and travelling wheels.**

Apply to—BARROWS AND STEWART, ENGINEERS, BANBURY.

### IMPORTANT TO MINE OWNERS.

**FOR SALE, a PLANT of ROCK-DRILLING MACHINERY quite new, comprising—**

**ONE AIR-COMPRESSING ENGINE, with 12 inch cylinders, 3 and 3½ in. rock drills, stretcher bars, &c., &c. Our Machines have been driving levels in hard rock 3 to 4 fathoms per week forward. Contracts undertaken.**

Address—WARSOB AND HILL, NOTTINGHAM.

**STEAM BOILERS FOR SALE, SECONDHAND, with and without Galloway Tubes, single and double rivetted, working pressure of 80 lbs., 65 lbs., 70 lbs., and 80 lbs. steam pressure. VERY CHEAP.**

**SIX BOILERS, 30 feet by 7 feet Galloway Tubes, " "**

**FOUR BOILERS, 28 feet by 7 feet " " "**

**THREE BOILERS, 26 feet by 7 feet " " "**

**FOUR BOILERS, 24 ft. by 6 ft. 6 in. " " "**

And other sizes in stock. Equal to new.

**WINDING ENGINES and COLLIERY PLANT of every description, second-hand, in stock. VERY CHEAP. Write to—**

**H. HELLEWELL and CO., 4, NORTH CORRIDOR, ROYAL EXCHANGE, MANCHESTER.**

**JAMES W. CHENHALL, Assoc. M.Inst.C.E., MORRISTON SWANSEA, SOUTH WALES.**

**IS OPEN TO UNDERTAKE THE DESIGNING and BUILDING of METALLURGICAL or CHEMICAL WORKS, or their PLANT by CONTRACT or otherwise. Extensive practical experience in the Treatment of Copper, Lead, Silver, and Zinc.**

**JOHN ROBERTSON, F.S.A., MINING AND CONSULTING ENGINEER, LAS VEGAS, NEW MEXICO.**

Mines and Mining Claims carefully examined, Assays made of their Ores, and reliable Reports furnished.

Mining Properties bought and sold on commission. Has special facilities for inspecting properties in Mexico.

References by permission:—L. P. BROWNE, Esq., Las Vegas, New Mexico; Don P. A. MANZANARES, Las Vegas, New Mexico; His Excellency H. M. HOTT, Governor of Pennsylvania, Harrisburg, Pa.; H. S. PIERCE, Esq., Banker, Scranton, Pa.; Hon. JOHN HANDLEY, President Judge 45th Judicial District, Scranton, Pa.; N. H. SHAFER, Esq., Cashier Third National Bank, Scranton, Pa.; E. B. STUBBS, Esq., Attorney-at-Law, Scranton, Pa.; E. W. WESTON, Esq., General Agent Delaware and Hudson Canal Company, Providence, Pa.; Hon. Sir JOHN P. CLARKE, Baronet, Tillypronie, Aberdeenshire, Scotland; R. L. CHANCE, Esq., Birmingham, England; FREDYVALE TAYLOR, Esq., of John Taylor and Son, 6, Queen-street-place, London. JOSEPH ROBERTSON, Esq., 17, Tokenhouse-yard, London.

**HERBERTON (WILD RIVER) TIN LODES, NORTH QUEENSLAND.**

Every information relative to the progress of lode-tin mining in the Wild River district (termed by geologists "The Cornwall of Australia") can be obtained by communicating with the undersigned. CHARLES JENKIN.

"Herberton Advertiser" Office, Herberton, September, 1882.

### ESTABLISHED 1861.

**MESSRS. CUNLIFFE, ENTWISLE, AND CO.,**

**FINANCIALISTS,**

**MINING AND CONSULTING ENGINEERS,**

**MINERAL ASSAYERS,**

**STOCK AND SHARE BROKERS,**

**77, BLOOMSBURY, OXFORD STREET; AND 2, UPPER BROOK STREET, MANCHESTER.**

Bankers: Manchester and Oldham Bank (Limited),

Fall Mall, Manchester.

## GOVERNMENT RAILWAYS OF NEW SOUTH WALES. CONTRACT FOR THE MANUFACTURE AND SUPPLY OF 150,000 TONS OF STEEL RAILS.

TO IRONMASTERS, MANUFACTURERS, AND OTHERS. THE GOVERNMENT OF NEW SOUTH WALES being desirous of encouraging the development of the local Iron Mining, and Iron and Steel Manufacturing Industries, are prepared to RECEIVE TENDERS for the SUPPLY of

ONE HUNDRED AND FIFTY THOUSAND TONS OF STEEL RAILS, To be manufactured in the Colony.

Sealed Tenders marked outside "Tenders for the Manufacture and supply of 150,000 tons of Steel Rails" will be received at the office of the Agent General of New South Wales, Westminster Chambers, Victoria-street, London, S.W., not later than the 30th November, 1884, and at the Public Works Office, Sydney, not later than the 10th February, 1885, at which latter place the whole of the Tenders will be opened at 11 o'clock, A.M., on the day last named.

Each Tender must be accompanied by a Bank Deposit Receipt to the credit of the Commissioner for Railways in the sum of (£1000) one thousand pounds sterling, as a guarantee of good faith. Such deposit will be returned to the unsuccessful Tenderers as soon as the Tenders have been declared, but the deposit of the successful Tenderer will be retained as security for the due performance of the Contract. Tenders not accompanied by such deposit will be absolutely rejected as informal.

Printed copies of preliminary Specifications and Conditions of Contract may be obtained on application at the office of the Commissioner for Railways, Sydney, and also from the Agent General of New South Wales, Westminster Chambers, Victoria-street, London, S.W.

Delivery of the rails is to commence not later than 1st December, 1886, and to be at the rate of not less than 15,000 tons per annum.

Contractors must give full information and particulars in their Tender as to the process of manufacture they intend to adopt, and also whether they will be prepared to manufacture and supply, at rates to be afterwards agreed upon, such points, crossings, fish-plates, and fastenings, &c., as may be required from time to time for the rails under this contract.

Contractors must state in their Tender whether they intend to manufacture the rails from native materials only, or whether, and to what extent, they intend to use imported material, giving a separate price per ton in each case. As it is unlikely that intending Contractors will enter into an engagement of the above nature without first satisfying themselves by personal inspection as to the position and extent of the raw material in New South Wales required for the manufacture of iron, every facility and information on this subject will be afforded on application to the Under Secretary of the Mines Department, Sydney, or to the Agent General of New South Wales, Westminster Chambers, Victoria-street, London, S.W., and free passes will be allowed on the Government Railways of New South Wales to representatives of Tenderers wishing to ascertain the resources of the colony.

For the information of persons desiring to Tender, it may be stated that the official returns show that there were imported into New South Wales and Victoria (the two Colonies joined each other, and are connected by Railway) within the last 10 years 1,250,000 tons of iron and steel, inclusive of the permanent way material required for Government and other railways constructed during the period mentioned.

CHAS. A. GOODCHAP, Commissioner for Railways. Department of Public Works, Railway Branch, Sydney, 1st October, 1883.

## TO COLLIERY PROPRIETORS AND COAL MERCHANTS.

**THE COMMISSIONERS OF IRISH LIGHTS** hereby give notice that they are prepared to RECEIVE TENDERS for the SUPPLY of

HOUSE COAL AND CANNEL AND FURNACE COAL

To the several Lighthouses round the Coast of Ireland, both for a term of one year and three years.

Contractors can offer for any of the Stations; but a preference will be given to those desiring to supply the entire number.

Tenders will be issued at this office between the hours of Eleven o'clock and Two o'clock, on and after Thursday, the 24th instant, and will be received by me up to noon on Thursday, the 7th February.

By Order, OWEN ARMSTRONG, Secretary.

Irish Lights Office, Dublin, 23rd January, 1884.

## IMPORTANT TO CAPITALISTS, INVESTORS, AND OTHERS.

THREE HUNDRED PER CENT. PROFIT.

**WANTED, CAPITALISTS AND INVESTORS TO JOIN a SYNDICATE for PURCHASING LEASES of known rich MINERAL PROPERTIES, offered at exceedingly low prices. Full particulars on application. Properties carefully examined and analysis of all ores by competent experts. MINING PLANT, MACHINERY, and STORES of every description at exceedingly low prices. A complete set of machinery for crushing and dressing 600 tons of ore monthly.**

Mr. JOHN L. M. FRASER, C.M.E., GREENFIELDS, WREXHAM.

## REDUCTION OFFICER.

**WANTED, to proceed to West Africa about March next, a thoroughly qualified person to perform the duties of REDUCTION OFFICER, and to TAKE CHARGE of a GOLD MINE in full work during the absence of the Manager.**

Apply by letter, stating terms and previous experience (copies only of testimonials), to "A. K. O.," 8, Birch-lane, E.C.

## PUMPWORK.

**WANTED, a 20 in. WORKING BARREL, 12 ft. stroke, with clack and bucket pieces; also a 19 in. PLUNGER, with case, clack, and H-pieces.**

Apply, "Box 7," MINING JOURNAL Office, 26, Fleet-street, E.C.

**WANTED, for the Continent, a FOREMAN, skilled in the MANUFACTURE OF SHOT. Preference will be given to one who is also competent to take charge of Sheet and Pipe Machinery.**

Application to be made to Messrs. BOWEN, SCOTT, and READ, Broadway Chambers, Westminster, S.W.

**WANTED, a RE-ENGAGEMENT as PRACTICAL MINING ENGINEER, competent to take charge and direct repairs.**

Knowledge of Spanish. Late of El Callao Gold Mining Company, Venezuela. Good testimonials.

Address, 2, Alice Villas, Birkbeck-road, Leytonstone, Essex.

## SPITZ-KOP (LYDENBURG) GOLD MINING COMPANY (LIMITED).

**WANTED, a MINING ENGINEER or CAPTAIN, experienced in the supervision of Gold Mining and the working of Quartz Mills; also a FOREMAN, experienced in Hydraulic Mining, Flaming, &c. State experience fully.**

Apply, by letter, No. 326, Mansion House Chambers, 11, Queen Victoria-street, E.C. EDWD. O. DWYER, Secretary.

**GOLD MINING ENGINEER WANTED, who has had practical experience in Alluvial and Quartz Gold Mining, to PROCEED to SOUTH AFRICA on an Exploration Expedition. First-class references required.**

Applications to be addressed "B. H.," 78, Rue de Monceau, Paris.

## THE UTILISATION OF THAMES MUD.

**AN OPPORTUNITY NOW OFFERS for an APPLICATION FOR SHARES of a company which is being privately formed to acquire a process for the utilisation of the mud of the River Thames. The Patent has been proved to be a most perfect commercial success, and the profits of the manufacture are of a highly remunerative character.**

Prospectus on application to JOHN C. STANLEY, Esq., 28, Martin's-lane, Cannon-street, London, E.C.

## HULL, BARNSELEY, AND WEST RIDING JUNCTION RAILWAY AND DOCK COMPANY.

ISSUE OF £3,000,000 FOUR PER CENT. PREFERENCE STOCK, 1884.

Notice is hereby given, that MONDAY, January 28th instant, is the LAST DAY on which APPLICATIONS for THIS STOCK can be received at the offices of the company in Hull.

By Order, J. DANIELL, Secretary

4, Charlotte-street, Hull, January 23rd, 1884.

## PHILLIPS' MONTHLY MACHINERY REGISTER—THE BEST MEDIUM IN THE KINGDOM

FOR THE PURCHASE OR SALE OF NEW OR SECONDHAND MACHINERY

Subscription, 4s. per annum, post free.

PUBLISHED BY AND PROPRIETOR, CHARLES D. PHILLIPS, NEWPORT MOW.



# NOBEL'S DYNAMITE



Manufactured and sold by  
**NOBEL'S EXPLOSIVES COMPANY, LIMITED**

(FORMERLY THE BRITISH DYNAMITE COMPANY LIMITED),  
Head Office: 149, West George Street, Glasgow.  
EXPORT AGENTS: JAMES THORNE AND CO., 85, GRACECHURCH STREET, LONDON, E.C.  
Factories—ARDEER WORKS, STEVENSTON, Ayrshire.  
WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.  
REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

## TONITE, OR COTTON POWDER,

IS RECOMMENDED TO CONTRACTORS, MINERS, PIT SINKERS, QUARRYMEN, AND OTHERS, AS BEING  
THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES

TONITE is the most efficient and economical blasting agent ever invented, and is largely in demand. It does not contain any Nitro-glycerine, and is, therefore, exempt from the dangers of exudation, or of freezing and its attendant process of thawing. The Company manufacture

### PATENT DETONATORS

of a quality much superior to the foreign article. Also supply Safety Fuse and Electric Firing Appliances of best description. The trade supplied on favourable terms.

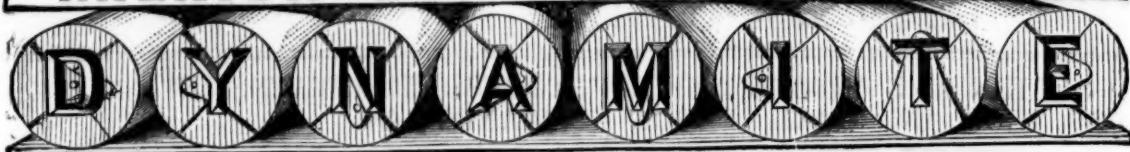
ADDRESS—THE COTTON POWDER COMPANY (LIMITED)

23, QUEEN ANNE'S GATE, LONDON, S.W.

WORKS: FAVERSHAM, KENT.

Agents: DINEEN and Co., Leeds; DAVID BURNS, Haltwhistle; R. J. CUNNACK, Helston, Cornwall; J. and W. SMITH, Chapel-en-le-Frith; W. VEITCH, Jedburgh, N.B. W. HARRISON, Barrow-in-Furness; W. J. PARRY, Bangor; HUNTER and FOTHERINGHAM, Glasgow.

## RHENISH DYNAMITE COMPANY.



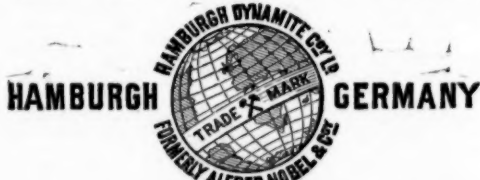
OF THE GREATEST STRENGTH ALLOWED BY THE EXPLOSIVES ACT.

OFFICES:—

1, Coleman Street Buildings, Moorgate Street, London, E.C.

LONDON AGENT,—E. KRAFTMEIER & CO., 5, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.

## NOBEL'S DYNAMITE.



MANUFACTURED AND SOLD BY THE

## DYNAMIT-ACTIEN-GESELLSCHAFT

VORMALS ALFRED NOBEL & CO., HAMBURG.

(HAMBURG DYNAMITE COMPANY, LIMITED),

Formerly ALFRED NOBEL & CO.

LONDON OFFICE: 42, BASINGHALL STREET, E.C.

BEST PRICES AND TERMS ON APPLICATION.

## BORLAND'S PATENT INJECTOR.

SEE THE ENGINEERING PAPERS.

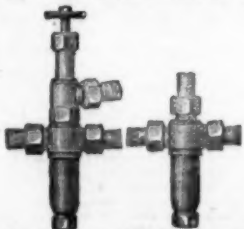
The cheapest and most economical.

Can be cleaned in a few minutes.

All parts made to gauge.

Made entirely of best gun metal.

Is the smallest and neatest.



Has no moving parts.

Will not shake off.

Has the most rapid delivery.

No joints to make.

Prompt and continuous action guaranteed.

S. BORLAND, Mansfield Chambers, St. Ann's Square, Manchester,  
(Late Manager for Sharp, Stewart, and Company, Limited, Atlas Works, Manchester. Upwards of 22 years with that firm.)

Price Lists, Particulars, References, &c., on Application.

For Excellence  
and Practical Success  
of Engines.



Represented by  
Model exhibited by  
this Firm.

**HARVEY AND CO.**  
(LIMITED),

ENGINEERS AND GENERAL MERCHANTS,  
HAYLE, CORNWALL.

LONDON OFFICE.—186, GRESHAM HOUSE, E.C.

MANUFACTURERS OF  
PUMPING and other LAND ENGINES and MARINE STEAM ENGINES  
of the largest and most approved kinds in use, SUGAR MACHINERY,  
MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.

SHIPBUILDERS IN WOOD AND IRON.  
MANUFACTURERS OF  
HUSBAND'S PATENT PNEUMATIC STAMPS

SECOND-HAND MINING MACHINERY FOR SALE,  
In Good Condition, at Moderate Prices—viz.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES,  
STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of  
various sizes and descriptions; and all kinds of MATERIALS required for  
MINING PURPOSES.



PACIFIC IRON WORKS

RANKIN, BRAYTON, AND CO.,

For Copper and Argentiferous Galena Ores.

GENERAL OFFICE AND WORKS,  
San Francisco, Cal., U.S.A.

BRANCH WORKS,—CHICAGO, ILLINOIS, U.S.A.

The Pacific Water Jacket Smelters embrace many features that  
are entirely new and of great practical utility, which are secured  
by letters patent.

No other furnaces can compare with these for durability, and in  
capacity for continuous and interrupted work.

More than One Hundred  
of them are now running in the various mining districts of the  
United States, giving results never before obtained as regards continuous  
running, economy of fuel grade and quality of bullion  
produced.

These Smelters are shipped in a complete state, requiring no  
brick or stone work, thus saving great expense and less of  
construction.

Complete smelting plants made to order, with all the improve-  
ments that experience has proved valuable in this class of machinery.  
Skilled and experienced smelters furnished when desired to examine  
mines and to superintend constructing and running of furnaces.  
Estimates given upon application. Send for circular.

We refer to A. S. CHURCH, Esq., 118, LEADENHALL STREET,  
E.C., LONDON.

THE

BEST METAL FOR BUSHES,

BEARINGS,

SLIDE VALVES,

And other wearing parts of Machinery.

PUMPS, PLUNGERS,

CYLINDERS, &c.

PHOSPHOR BRONZE

WIRE, TUBES

SHEET, RODS

TOOLS, &c.

STEAM

FITTINGS

SOLE

MANUFACTURERS

UNDER PATENTS.

THE

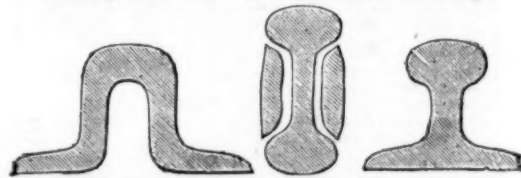
PHOSPHOR BRONZE

COMPANY, LIMITED,

SUMNER STREET, SOUTHWARK  
LONDON, S.E.

JOHN BEATSON & SON.

40h, St. Mary's Gate, Derby.



IRON AND STEEL RAILS, of all sections, from 10 to 86 lbs. per  
yard, new perfect, new slightly defective, or second-hand, with Fish-plates,  
Bolts and Nuts, Chairs, Spikes, and Points and Crossings to match, when re-  
quired.

STEEL AND IRON WIRE ROPES, LOCOMOTIVE ENGINES, &c., &c.

BARNS, PLATES, SHEETS, &c.

STEEL OF ALL KINDS. PIG IRON OF ALL KINDS

Delivered at all Railway Stations and Ports in Great Britain.

**WILLIAM BENNETTS,**

PATENT MINERS'

SAFETY FUSE

MANUFACTURER.



This manufacture embraces all the latest improvements for use in  
Blasting in Mines, Quarries, or for Submarine Purposes; and is  
adapted for exploding Gunpowder, Dynamite, or any other Ex-  
plosive; and is made suitable for exportation to any part of the world.  
Price Lists and Sample Cards on application.

All communications to be addressed—

**ROSKEAR FUSE WORKS,**  
CAMBORNE CORNWALL.

CALIFORNIAN AND EUROPEAN AGENCY,  
509, MONTGOMERY STREET, SAN FRANCISCO, CAL.

J. JACKSON, Manager.



**MINES—continued.**

**NON-DIVIDEND MINES—continued.**

NON-DIVIDEND MINES—continued.				
Stares.		Prod.	Last w <sup>k</sup> .	Clas. pr.
25000	North Grogwinlon, * s, Cardighsr.	1 0 0	34	34
12000	North Herodsfoot, i, Liskeard	0 13 0	—	—
8000	North Molton, * e, m, t, Devon	1 0 0	—	—
8000	North Penstruthal, t, c, Gwennap	3 4	34	34
2336	North Trevelchy, c, St. Agnes	1 0 0	—	—
8000	Northern, * i, Durham	8 17 0	—	—
40000	Okei Tor, * t, c, a, Calstock	1 0 0	—	—
80000	Old Shepherds s-i, Cornwall	1 0 0	34	34
60000	Owen Veau & Tregur, * t, c, Marazion	1 0 0	134	1 134
45000	Pary Corporation, * c, Anglessea	1 0 0	34	2a, 3a
7500	Pateley Bridge, i, Yorkshire	1 0 0	—	—
6000	Pedin-an-drea, t, Redruth	4 3 0	—	—
8000	Pennant, i, bar, North Wales*	5 0 0	5	4 5
20000	Pengargareg, i, Carmarthenshire	1 0 0	—	—
15000	Perr-y-Ossed, i, t, Flintshire	1 0 0	34	34
15000	Penryn Consols, * s, i	1 0 0	—	—
12000	Piech, s, Alford, c	0 2 6	—	—
8000	Polebrook, t, Crownan	0 2 6	34	34
4516	Polrose, t, Cornwall	1 12 0	34	34
10000	Port Nigel Syn, * s-i, Carnar (4000 i.e.)	0 15 0	34	34
18000	Pr. Patrick, * s-i, (12000 p.p. 10 p.p.)	1 0 0	—	—
12000	Prince of Wales, c, a, Calstock	1 0 0	34	34
30000	Russell United, * c, Tavistock	0 15 8	34	34
30000	Silver Hill, * Callington	1 0 0	—	—
50000	Sinclair, * i, b, i, Whitford	1 0 0	134	1 134
40000	Sorbridge, * c, Horrabridge	1 0 0	—	—
6000	South Okeford, c, s, Redruth	0 10 0	2	134
42000	So. Devon Union, s, i, Calleigh.	0 10 0	1	34
5000	South Dolcoath, c, t, Illogan	0 10 0	1	34
6000	South Kitty, t, St. Agnes	0 0 0	34	34
8000	South Penstruthal, t, c, Gwennap	3 10 8	—	—
30000	So. Phoenix & Caradon, * t, c, Llinkinh.	1 0 0	134	1 134
6000	South Tolcarne, c, s, Oamborne	5 11 8	—	—
2043	South Wheal Crofty, c, Illogan	5 4 6	2	2 34
12000	South Wheal Frances, c, t, Illogan	5 10 4	5 34	5 34
11000	Tamar, * i, Bearlston	1 0 0	1	34
20000	Tankerville Gt. Consols, t, Fallop	1 0 0	34	34
12000	Trebartha Lemanne, t, Northill	0 4 9	34	34
6000	Trembois, t, c, Cornwall	4 0 0	—	—
50000	Tregentrees and Old Polgooth Con.	1 0 0	34	34
100000	Tresavean, t, c, Gwennap	1 0 0	34	34
60000	Trevauren United, t, c, Cornwall	1 0 0	—	—
10000	West Cornish, c, St. Agnes	5 0 0	234	234
1000	Vaughan, * t, Cardighsr.	10 0 0	—	—
50000	Weardale, * i, Northumber. (44 shab)	1 0 0	134	134
12000	West Assheton, t, Carnarvon	1 0 0	—	—
12000	West Cardon, c, St. Cleer	0 9 3	3a	2a, 3a
3000	W. Craven Moor, i, Pateley Bridge	10 0 0	—	—
12000	West Orebou, c, Tavistock	0 11 6	6a	4a, 5a
10240	West Devon Consols, c, Calstock	1 2 0	—	—
10000	West Dophila, t, c, St. Cleer	1 3 6	134	134
2000	West Gomenas, c, St. Agnes	1 0 0	34	34
20000	West Lisburne, i, Cardigan	1 0 0	34	34
3000	West Mary Ann, t, Menheniot	1 13 0	34	34
30020	Westminster, i, Flintshire	1 0 0	134	1 134
20020	W. Pateley Bridge, t, Yorkshire	1 0 0	—	—
12000	West Phoenix, t, Llinkinhorne	1 5 0	34	34
6000	West Polbreton, t, c, St. Agnes	0 9 8	1	34
5190	West Polzeath, c, St. Agnes	7 5 6	8	34
2000	West Wheal Frances, t, Illogan	38 10 6	8	7 34
2000	West Wheal Peavor, t, Redruth	18 10 6	8	34
2400	West Wheal Seton, c, Oamborne	17 10 6	8	34
6000	Wheal Agar, c, Illogan	19 6 0	11	11 12
6144	Wheal Bassett, c, Illogan	8 19 8	43	34
4000	Wheal Benny, * c, t, Litchley	5 0 0	—	—
3000	Wheal Bosy, t, Redruth	1 3 8	—	—
50000	Wheal Buzard, c, St. Agnes	1 0 0	134	134
2000	Wheal Coates, t, St. Agnes	1 0 0	—	—
2585	W. Comf., & No. Treas., t, c, Gwennap	2 2 0	1	34 1
30100	Wheal Britannia, t, c, Gwennap	1 0 0	34	34
50000	Wheal Elizabeth, t, Cornwall	1 0 0	—	—
12238	Wheal Jane, t, Kea	3 1 6	34	34
12000	Wheal Jewell, c, St. Hilary	1 0 8	34	34
25000	Wn. Honey and Trevaun, * s, i, Lisk.	2 0 0	34	34
12000	Wheal Jacky, t, Callington	0 3 6	34	34
2000	Wheal Owlsey, t, St. Juke	7 0 0	—	—
30000	Wn. Silver & Lanteglos, * s-i, Carnarvon	1 0 0	34	34
6000	Wheal Sisters, t, Lelant	4 2 6	1	34 1
4036	Wheal Uny, t, c, Redruth	19 9 6	134	1 134
21955	Wye Valley, t, Montgomery.	1 0 0	34	34
40000	Yendand Consols, * t, Devonshire	0 12 6	34	34
4000	Ysawth, t, Cardigan	1 0 0	34	34

bl, blende; c, copper; g, gold; l, lead; s, silver; sl, slate  
sl, silver-lead; t, tin; z, zinc; i, iron; a, arsenic.  
Limited Liability Companies; 1 quoted on the Stock Exchange.  
I have paid dividends.

**NON-DIVIDEND FOREIGN MINES; FOREIGN AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE COMPANIES; GAS, IRON AND COAL, WAGON COMPANIES, &c.**

NON-DIVIDEND FOREIGN MINES.				NON-DIVIDEND FOREIGN MINES—continued.				IRON AND COAL COMPANIES.				GAS COMPANIES.					
Shares.	Paid.	Clos.	pr.	Shares.	Paid.	Clos.	pr.	Shares.	Company.	Paid.	Clos.	pr.	Issue.	Shares.	Pd.	Clos.	
50000 Akankoo, g, Gold Cat. (100000 lss.)	0 17	8..	3/4 3/4	120000 Santa Cruz, s, (ex 10s. retid. cap.)	1 0	0..		4100 Abbot, John, and Co [L].....	25 75	0..	32 3/4 35	5000..	20..	Bahia [L].....	all..	22 25	
49480 Anglo-African, d, Kimberley, l	10 0	0..	1 2	50000 Sentein, s, l, bl, Arizge, France...	1 0	0..	1/2 1/2	5 Alltami Colliery Co. [L].....	5 0	0..		510000..	5 ..	Bombay [L].....	all..	5 1/2	
50000 Anglo-Mexican, s, (also 325 sh. £1.)	5 0	0..	5/4 5/4	100000 Silver Churd, s, Colorado	1 0	0..		100 Ashbury Co. [L] (new).....	90 0	0..	28 1/2 27 1/2	49700..	5 ..	Ditto, New [L].....	all..	4 1/2	
12000 Arendal, c, Norway	4 0	0..		250000 Silver Peak, s, Colorado	1 0	0..		3 Bagnall, John, and Sons [L]....	3 0	0..		14000..	80k ..	Brentford Consolidated.....	all..	102 100	
20000 Asia Minor, s, l, Lidgeys, Birva	0 15	0	0..	100000 Souback & Catir Alan, g, s, l, Turkey	1 0	0..		10 Benhar Coal Co. [L].....	10 0	0..		50000..	80k ..	Commercial.....	all..	39 41	
20000 Belt, s, c, Lake Sup. (20000 2d paid)	5 0	0..	3/4 4	100000 So. Austral. Corp. Mines (Corp. of)	1 0	0..	3/4 3/4	100 Bilboa River & Cantabrian R. Co. 100	0	0..	5 1/2 6	20000..	20 ..	Continental Union [L].....	all..	210 240	
40000 Brazilian, s, Brazil	1 0	0..		100000 Tannus, s, s, c, Germ. (& 100,000 pf.)	1 0	0..		20 Bolcock, Vaughan, and Co. [L] 12	0	0..	10 1/2 10 1/2	20000..	20 ..	Do. do. New, 1883, 1872	all..	33 34	
20000 British Australian, g, N. So. Wales	1 0	0..		100000 Tocopilla, s, c, Bolivia	0 15	0	3/4 3/4	50 Brown, Bailey, and Dixon [L] 40	0	0..		10000..	20 ..	Do. do. 7 per cent. Preference	all..	28 29	
18000 Broadway, g, California	5 0	0..	3/4 3/4	43174 United Mexican, s, l, Mexico	9 12	0	9 1/2 10 1/2	100 Brown, John, and Co. [L].....	75 0	0..	57 1/2 58 1/2	23400..	10 ..	European [L].....	all..	19 1/2 20	
18000 Buena Ventura, s, l, Spain (fy. pd.)	2 0	0..		200000 Virneberg, c, Rhienbreith, Ger. s.	2 0	0..		20 Cammell and Co. [L].....	80 0	0..	67 1/2 67 1/2	94850..	80k ..	Gaslight and Coke, A. Ord.	all..	200 202	
130000 Callao Bie, s, Venezuela	1 0	0..	3/4 3/4	100000 Victoria, s, c, Venezuela	1 0	0..	3/4 3/4	20 Cannon & Huntingdon Coal [L] 10	0	0..	10 1/2 10 1/2	244200..	80k ..	Do, 4 per cent. Deb. Stock.	all..	100 104	
10000 Canada, s, Canada	1 0	0..		100000 Wentworth, s, c, Wynaad.	1 0	0..	3/4 3/4	50 Charlton Iron Co. [L].....	20 0	0..		240000..	80k ..	Hong Kong and China	all..	16 1/2 17 1/2	
22500 Canadian, c, sul, Canada	4 0	0..	3/4 3/4	100000 West Frisco & Boliv., s, c, Colombia	1 0	0..	3/4 3/4	50 Chatterley Iron Co. [L].....	10 0	0..	5 6	12000..	5 ..	Malta & Mediterranean [L].....	all..	138 132	
20000 Central Jagersfontein Diamond	5 0	0..	3/4 3/4	100000 Wynad District, s, g, India	1 0	0..	1/2 1/2	10 Chilling Iron Co. [L].....	10 0	0..	3/4 1 1/4	100000..	80k ..	Metrop. of Melbourne p.c. Deb.	all..	2 1/2 3	
130000 Cherrambadi (Wynad) District, s, g	1 0	0..		100000 Wynad Perseverance, s, g	1 0	0..	1/2 1/2	10 Consett Iron Co. [L].....	7 1/2	22	23	25000..	20 ..	Monte Video [L].....	all..	15 1/2 16 1/2	
50000 Chile, s, c, Venezuela	0 15	0	3/4 3/4	75000 York Peninsula, c, So. Australia	1 0	0..	3/4 3/4	10 Consett Spanish Ore [L].....	1 0	0..	2 1/2 2 1/2	10000..	5 ..	Ottoman [L].....	all..	4 1/2 4 1/2	
75000 Colar, s, c, Mysore	1 0	0..	3/4 3/4	140000 Yuba River, s, c, So. Australia	1 0	0..		20 Darlington Iron Co. [L].....	18 10	0..	3 1/2 3 1/2	30000..	5 ..	Oriental [L].....	all..	7 1/2 8	
75000 Colombian Hydrocarilo, g, Colombia	1 0	0..	3/4 3/4					20 Davy Brothers [L].....	22 10	0..		27500..	20 ..	Rio de Janeiro [L].....	all..	24 1/2 25 1/2	
80000 Coatsworth, s, c, Wynad	0 15	0	3/4 3/4	INSURANCE COMPANIES.				500000..	80k ..	South Metropolitan, A.	100..	240 250	50000..	80k ..	Ditto, ditto, B.	all..	210 220
125000 Chontales, s, s, Nicar. (108749 lss.)	1 0	0..	3/4 3/4	Issue, Shares.	Pd.	Clos.	pr.	23 Ebbw Vale Co. [L].....	20 0	0..	5 1/2 5 1/2						
20000 Clear Creek, s, s, Colorado	1 0	0..		100000 Alliance British and Foreign	11	38	39	8 Knowles, Andrew, and Co [L] 25	0	0..	6 1/2 7						
120000 Devala Central, s, g, Wynaad	1 0	0..		100000 Ditto, Marine	10	21	22	20 Llynvi and Tondy [L].....	20 0	0..	3 1/2 3 1/2						
100000 Devala Moyer, s, g, Wynaad	1 0	0..	3/4 3/4	500000 20 British and Foreign Marine [L]	5	18 1/2	19 1/2	10 Lydney & Wigpool Iron Ore [L] 9	12	1/2	1 1/2						
75000 Devala Provident, s, g, Wynaad	0 10	0..		500000 50 Commercial Union	5	8	8 1/2	10 Midland Iron Co. [L].....	5 0	0..	1 1/2 2 p m						
100000 Dingley Dell, s, g, Devala, India	1 0	0..		50000 50 Eagle	5	8	8 1/2	10 Monkland Iron & Coal Co. [L] 10	0	0..							
125000 Don Pedro North del Rey	1 0	0..		50000 10 Globe Marine [L]	2	1	1 1/2	4 Mywynd Iron Ore [L].....	3 15	0	0 3/4						
285158 Eberhardt, s, Nevada	1 0	0..	3/4 3/4	27500 100 Imperial Life	10	22	24	25 Newport & Gloe Blains (s.p.c. pref.) 62	10	49	50						
50000 Eureka, s, Nevada	1 0	0..		13453 100 Indemnity Marine	50	15	16	35 Newbould Coal and Iron [L].....	2 1/2	15 1/2	15 1/2						
100000 Eschewer, s, c, California	1 0	0..	3/4 3/4	100000 10 Lion Fire [L]	1 1/2	3 1/2	3 1/2	10 Newport Abercrom Coal Co [L] 10	0	0..	1 1/2						
80000 Flagstaff District, s, g, Utah	1 0	0..		49524 20 L'pool & Lond. Globe (21 anny)	2	23	24	35 Palmer's Shipbildg. & Iron [L] 25	0	0..	28 1/2 27 1/2						
50000 Gold Coast, s, g, Wazau	1 0	0..		35852 25 London	12 1/2	55	57	100 Parkgate Iron Co. [L].....	65 0	72	73						
50000 Gold Hill, s, g, North Carolina	1 0	0..	3/4 3/4	40000 25 London and Lancashire Fire	3	4 1/2	4 1/2	20 Patent Nut and Bolt [L].....	14 0	25 1/2	25 1/2						
50000 Gold Mining Assn. of Canada	1 0	0..		40000 25 London and Provincial Marine [L]	3	4 1/2	4 1/2	50 Pearson and Knowles, B.	50 0	33	35						
35000 Great Southern Mysore, s, g	1 0	0..		40000 25 Marine	4 1/2	37	38	20 Peisall Coal and Iron [L].....	20 0	12	13						
20000 Haverhill, s, g, North Carolina	1 0	0..	3/4 3/4	50000 10 Merchants' Marine [L]	2	1	1 1/2	5 Rhymney Iron Co. [L].....	5 0	1	1 1/2						
12000 Hultafall, s, l, l, Orebro, Sweden	5 0	0..		50000 10 Maritime [L]	2	4	4 1/2	10 Sandwell Park Colliery Co. [L] 10	0	0..							
100000 Indian Consolidated, s, g	1 0	0..	3/4 3/4	80000 25 North British and Mercantile	5 1/2	24	26	100 Shotts Iron Co. [L].....	100 0	36	38						
10000 Ind. Glenrock, s, g, Wynaad	1 0	0..	3/4 3/4	20000 100 Northern	10	42	44	25 Sheepbridge Iron and Coal [L] 20	0	9 1/2	10 1/2						
150000 Isabelle, s, g, s, California	1 0	0..		40000 25 Ocean Marine	5	5 1/2	6 1/2	50 Silkeston & Boddy, C. & Iron [L] 45	0	0..							
100000 I. X. L., s, g, s, California	1 0	0..	3/4 3/4	— Phoenix	—	222	227	80 Somerley Iron Co. [L].....	50 0	0..							
50000 Javali, s, g, Nioragun	2 0	0..		200000 10 Queen	10	7	7 1/2	100 Staveley Iron and Coal Co [L] 60	0	69	70						
50000 Kapanga, s, g, New Zealand	1 0	0..	3/4 3/4	100000 10 Railway Passengers	3 1/2	7	7 1/2	100 Ditto ditto	10 0	10 1/2	10 1/2						
100000 Kohinor, s, c, Colorado	1 0	0..	3/4 3/4	200000 80 Rock Life	20	8	8 1/2	50 Teeside Iron & Engine Works	5 0	3	3 1/2						
100000 Lisbon-Berlyn, s, g, South Africa	1 0	0..	1 1/4 1 1/4	50000 80 Sea	3	8	8 1/2	20 Tredgair Iron and Coal, A [L] 30	0	18 1/2	19 1/2						
10000 London and California, s, l	2 0	0..		135000 20 Lancashire	2	4 1/2	4 1/2	25 Ditto ditto	25 0	16 1/2	17 1/2						
50000 Madras, s, g, Mysore	1 0	0..		4000 20 Standard Marine	4	—	—	10 Vancouver Coal [L].....	8 0	5 1/2	6						
50000 Michiliponten, nat. c, Quebec	1 0	0..	3/4 3/4	10000 20 Thames and Mersey Marine [L]	2	10 1/2	10 1/2	25 W. Cumberland Iron & Steel [L] 20	0	7 1/2	7 1/2						
50000 Misouri, l, pref (fully paid)	10 0	0..		4040 20 Union Marine, Liverpool [L]	2 1/2	4 1/2	5 1/2										
50000 Moselle, s, l, s, Germany	1 0	0..		50000 20 Universal Marine [L]	3	6 1/2	7 1/2										
25000 Mysore, s, g, India	1 0	0..	3/4 3/4														
75000 New Callao, s, g, Venezuela	1 0	0..		MISCELLANEOUS.				BANKS.				TELEGRAPH COMPANIES.					
78000 New Emma, s, s, Utah	10 0	0..	3/4 1	Shares.	Company.	Paid.	Price.	Shares.	Company.	Pd.	Clos.	pr.	Shares.	Company.	Pd.	Clos.	
37000 N. Gold Run, s, g, Cal. (& 3700 pref)	1 0	0..	3/4 3/4	10 Anglo-American Brush	3 0	—	—	100000 10 Agria [L].....	all..	10	10 1/2		100000 10 Anglo-American	100 0	39 40		
20000 New World, s, Ven. (ex com. 17)	1 0	0..		10 Ditto do	10 0	—	—	80000 20 Anglo-Egyptian Banking [L]	all..	17 1/2	18 1/2		100000 10 Brazilian Submarine	10 0	10 1/2		
50000 Newydd, s, g, s, Mysore	1 0	0..		5 Australian Electric	3 0	—	—	30000 40 Bank of Australasia	all..	89	91		100000 10 Cuban	10 0	10 1/2		
50000 Oatase, s, l, Leadville, Colorado	1 0	0..		20 Australian Agricultural	21 10	85	88	12500 40 Bank of British Columbia	all..	23 1/2	24 1/2		100000 10 Direct Spanish	20 0	10 1/2		
25000 Oregon, s, g																	